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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 NOV 21 CAS patent coverage to include exemplified prophetic  
substances identified in English-, French-, German-,  
and Japanese-language basic patents from 2004-present  
NEWS 3 NOV 26 MARPAT enhanced with FSORT command  
NEWS 4 NOV 26 CHEMSAFE now available on STN Easy  
NEWS 5 NOV 26 Two new SET commands increase convenience of STN  
searching  
NEWS 6 DEC 01 ChemPort single article sales feature unavailable  
NEWS 7 DEC 12 GBFULL now offers single source for full-text  
coverage of complete UK patent families  
NEWS 8 DEC 17 Fifty-one pharmaceutical ingredients added to PS  
NEWS 9 JAN 06 The retention policy for unread STNmail messages  
will change in 2009 for STN-Columbus and STN-Tokyo  
NEWS 10 JAN 07 WPIDS, WPINDEX, and WPIX enhanced Japanese Patent  
Classification Data  
NEWS 11 FEB 02 Simultaneous left and right truncation (SLART) added  
for CERAB, COMPUAB, ELCOM, and SOLIDSTATE  
NEWS 12 FEB 02 GENBANK enhanced with SET PLURALS and SET SPELLING  
NEWS 13 FEB 06 Patent sequence location (PSL) data added to USGENE  
NEWS 14 FEB 10 COMPENDEX reloaded and enhanced  
NEWS 15 FEB 11 WTEXTILES reloaded and enhanced  
NEWS 16 FEB 19 New patent-examiner citations in 300,000 CA/CAPLUS  
patent records provide insights into related prior  
art  
NEWS 17 FEB 19 Increase the precision of your patent queries -- use  
terms from the IPC Thesaurus, Version 2009.01  
NEWS 18 FEB 23 Several formats for image display and print options  
discontinued in USPATFULL and USPAT2  
NEWS 19 FEB 23 MEDLINE now offers more precise author group fields  
and 2009 MeSH terms  
NEWS 20 FEB 23 TOXCENTER updates mirror those of MEDLINE - more  
precise author group fields and 2009 MeSH terms  
NEWS 21 FEB 23 Three million new patent records blast AEROSPACE into  
STN patent clusters  
NEWS 22 FEB 25 USGENE enhanced with patent family and legal status  
display data from INPADOCDB  
NEWS 23 MAR 06 INPADOCDB and INPAFAMDB enhanced with new display  
formats  
NEWS 24 MAR 11 EPFULL backfile enhanced with additional full-text  
applications and grants  
NEWS 25 MAR 11 ESBIOBASE reloaded and enhanced  
NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS      STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN      Welcome Banner and News Items  
NEWS IPC8        For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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\*\*\*\*\* STN Columbus \*\*\*\*\*

FILE 'HOME' ENTERED AT 17:35:30 ON 16 MAR 2009

=> fil reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'REGISTRY' ENTERED AT 17:35:43 ON 16 MAR 2009  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 MAR 2009 HIGHEST RN 1121544-94-2  
DICTIONARY FILE UPDATES: 15 MAR 2009 HIGHEST RN 1121544-94-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

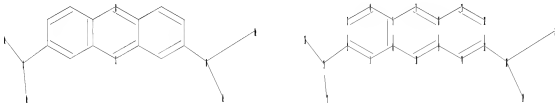
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>  
Uploading C:\Program Files\STNEXP\Queries\10573882specie.str



chain nodes :  
15 16 17 18 19 20  
ring nodes :  
1 2 3 4 5 6 7 8 9 10 11 12 13 14

```

chain bonds :
2-15 13-18 15-16 15-17 18-19 18-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-14 11-12 12-13
13-14
exact/norm bonds :
2-15 13-18
exact bonds :
15-16 15-17 18-19 18-20
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-14 11-12 12-13
13-14

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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS

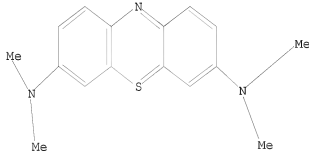
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L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 fam sss

'FAM' IS NOT VALID HERE

For additional help, enter "HELP SEARCH".

=> s l1 fam sam

SAMPLE SEARCH INITIATED 17:36:41 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 39 TO ITERATE

100.0% PROCESSED 39 ITERATIONS

24 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 406 TO 1154

PROJECTED ANSWERS: 187 TO 773

L2

24 SEA FAM SAM L1

=> s l1 fam full  
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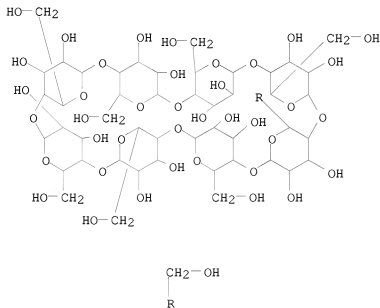
100.0% PROCESSED 606 ITERATIONS 346 ANSWERS  
 SEARCH TIME: 00.00.01

L3 346 SEA FAM FUL L1

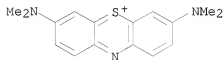
=> d scan

L3 346 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN  $\gamma$ -Cyclodextrin, compd. with 3,7-bis(dimethylamino)phenothiazin-5-ium  
 and 4-[(4-hydroxy-1-naphthalenyl)azo]benzenesulfonic acid (2:1:1) (9CI)  
 MF C48 H80 O40 . 1/2 C16 H18 N3 S . 1/2 C16 H12 N2 O4 S

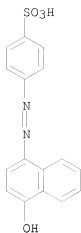
CM 1



CM 2



CM 3



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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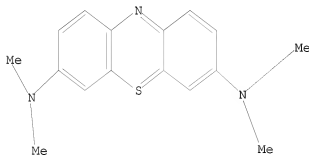
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For additional help, enter "HELP SEARCH".

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L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 exa full

FULL SEARCH INITIATED 17:38:08 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 32 TO ITERATE

100.0% PROCESSED 32 ITERATIONS

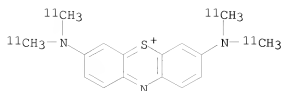
9 ANSWERS

SEARCH TIME: 00.00.01

L4 9 SEA EXA FUL L1

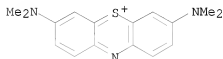
=> d scan

L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN Phenothiazin-5-ium, 3,7-bis[di(methyl-11C)amino]-  
MF C16 H18 N3 S  
CI COM

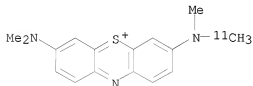


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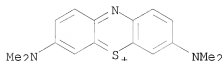
L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Phenothiazin-5-ium, 3,7-bis(dimethylamino)-, labeled with tritium (9CI)  
 MF C16 H18 N3 S  
 CI COM



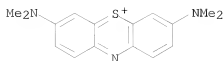
L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Phenothiazin-5-ium, 3-(dimethylamino)-7-(methylmethyl-11C-amino)- (9CI)  
 MF C16 H18 N3 S  
 CI COM



L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Phenothiazin-5-ium, 3,7-bis(dimethylamino)-, radical ion(1+) (9CI)  
 MF C16 H18 N3 S  
 CI RIS

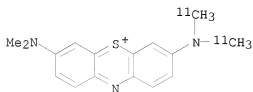


L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
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 MF C16 H18 N3 S  
 CI COM

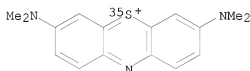


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

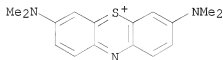
L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Phenothiazin-5-ium, 3-(dimethylamino)-7-[di(methyl-11C)amino]-  
 MF C16 H18 N3 S  
 CI COM



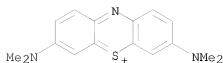
L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Phenothiazin-5-ium-5-35S, 3,7-bis(dimethylamino)- (9CI)  
 MF C16 H18 N3 S  
 CI COM



L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Phenothiazin-5-ium, 3,7-bis(dimethylamino)-, labeled with carbon-14 (9CI)  
 MF C16 H18 N3 S  
 CI COM



L4 9 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Phenothiazin-5-ium, 3,7-bis(dimethylamino)-, monobromo deriv. (9CI)  
 MF C16 H17 Br N3 S  
 CI IDS, COM



D1-Br

ALL ANSWERS HAVE BEEN SCANNED

=> fil cap

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

138.33

138.55

FILE 'CAPLUS' ENTERED AT 17:39:03 ON 16 MAR 2009

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FILE COVERS 1907 - 16 Mar 2009 VOL 150 ISS 12

FILE LAST UPDATED: 15 Mar 2009 (20090315/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 17:35:30 ON 16 MAR 2009)

FILE 'REGISTRY' ENTERED AT 17:35:43 ON 16 MAR 2009

L1 STRUCTURE UPLOADED

L2 24 S L1 FAM SAM

L3 346 S L1 FAM FULL

L4 9 S L1 EXA FULL

FILE 'CAPLUS' ENTERED AT 17:39:03 ON 16 MAR 2009

=> s 14

L5 102 L4

=> s 14 and (pry<2004)

102 L4

4268391 PRY<2004

L6 9 L4 AND (PRY<2004)

=> d 1-9 ibib abs hitstr

L6 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:873862 CAPLUS

DOCUMENT NUMBER: 141:372543

TITLE: Colored resin composition, photosensitive colored resin composition, and color filter

INVENTOR(S): Kitazawa, Kazushige; Tani, Mizuhito; Ito, Hiromitsu; Hiratsuka, Ichiro; Kimishima, Koichi; Tomita, Atsuo

PATENT ASSIGNEE(S): Toppan Printing Co., Ltd., Japan; Asahi Denka Kogyo K. K.

SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

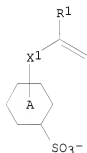
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

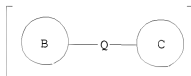
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004292507	A	20041021	JP 2003-83772	20030325 <--
PRIORITY APPLN. INFO.: OTHER SOURCE(S):	MARPAT 141:372543		JP 2003-83772	20030325 <--

GI



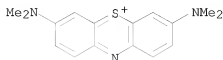
I



II

AB The composition is based on a resin and colorant monomers involving an anionic monomer I [R1 = H, Me; X1 = direct bond, OC(O), NHC(O), OR2OC(O), OR3NHC(O); R2, R3 = C1-8 alkylene; A = C6H4, C10H6; except triarylmethane] showing maximum absorption at 610-700 nm, which may be polymerized Alternatively, the composition further contains ≥1 cation selected from polymethine II [B, C = cyclic groups defined in the claim; Q = (ring-involving) pentamethine] and thiazine or oxazine III (Y9 = O, S; Rs are defined in the claim). The above compns. are mixed with a photosensitive component to give the photosensitive colored resin composition The color filter has transparent multicolor patternwise aligned films for coloring and emitting of incident lights, wherein ≥1 of the films is made of the above composition The filter shows enhanced transparency and heat and light resistance.

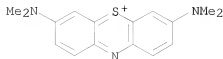
IT 7060-82-4  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (photosensitive colored resin composition made of anionic monomer and  
 optionally cation for color filter)  
 RN 7060-82-4 CAPLUS  
 CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)



L6 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:481813 CAPLUS  
 DOCUMENT NUMBER: 141:9233  
 TITLE: Methods for synthesis of concentrated aqueous solution  
 of hydrogen peroxide by solar energy  
 Miletiev, R. G.  
 INVENTOR(S): Bulg.  
 PATENT ASSIGNEE(S): Bulg. Pat. Appl., 10 pp.  
 SOURCE: CODEN: BGXXAZ  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Bulgarian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BG 103424	A	20010430	BG 1999-103424	19990521 <--
PRIORITY APPLN. INFO.:			BG 1999-103424	19990521 <--

AB Methods for synthesis of concentrated aqueous solution of hydrogen peroxide  
 H2O2 by  
 solar energy at pH=6.5-7 are described which are characterized by the use  
 of an aqueous solution of chlorophyll which, in its excited state, oxidizes  
 water  
 while forming oxygen and reduces the oxidized form of an oxidation-reduction  
 system, where the reduced form of the oxidation-reduction system produces  
 hydrogen peroxide under atmospheric oxidation; and where the enzyme superoxide  
 dismutase eliminates the superoxide ion from the reaction medium and the  
 prepared H2O2 is separated from the solution using reverse osmosis and  
 concentrated in 2  
 steps: chemical reaction with CaCl2-NH3-CO2 system followed by rectification.  
 Examples are presented for various oxidation-reduction systems such as  
 pyocyanin  
 resins, and mixts. of flavin-adenine dinucleotide with di-Me viologen or  
 with methylene blue.  
 IT 7060-82-4P, Phenothiazin-5-ium, 3,7-bis(dimethylamino)-  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical  
 process); PNU (Preparation, unclassified); RCT (Reactant); PREP  
 (Preparation); PROC (Process); RACT (Reactant or reagent)  
 (method for synthesis of concentrated aqueous solution of hydrogen peroxide  
 by solar  
 energy)  
 RN 7060-82-4 CAPLUS  
 CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)



L6 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:466330 CAPLUS

DOCUMENT NUMBER: 129:109096

ORIGINAL REFERENCE NO.: 129:22417a

TITLE: Preparation of salts of heterocyclic anions and their uses as ionic conductive materials

INVENTOR(S): Armand, Michel; Choquette, Yves; Gauthier, Michel; Michot, Christophe

PATENT ASSIGNEE(S): Centre National de la Recherche Scientifique (CNRS), Fr.; Hydro-Quebec

SOURCE: Eur. Pat. Appl., 39 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

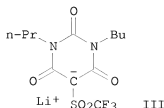
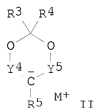
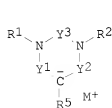
FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

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US 6228942	B1	20010508	US 1998-125798	19981202 <--
US 6395367	B1	20020528	US 1998-125799	19981202 <--
US 6319428	B1	20011120	US 1998-125797	19981203 <--
US 6365068	B1	20020402	US 2000-609362	20000630 <--
US 6576159	B1	20030610	US 2000-638793	20000809 <--
US 20010024749	A1	20010927	US 2001-826941	20010406 <--
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			WO 1997-CA1011	W 19971230 <--
			WO 1997-CA1012	W 19971230 <--
			WO 1997-CA1013	W 19971230 <--
			US 1998-101810	A3 19981119 <--
			US 1998-101811	A3 19981119 <--
			US 1998-125798	A3 19981202 <--
			US 1998-125799	A3 19981202 <--
			US 1998-125797	A1 19981203 <--
			US 2000-638793	A1 20000809 <--
			US 2001-858439	A1 20010516 <--
			US 2002-107742	A1 20020327 <--

OTHER SOURCE(S): CASREACT 129:109096; MARPAT 129:109096  
GI



AB Salts of heterocyclic anions I and II [R1 = R2 = organic radical such as alkyl, fluoroalkyl; R3 = R4 = organic radical such as alkyl, fluoroalkyl; R3R4 = O; R5 = electron attracting group such as CN, alkylsulfonyl,

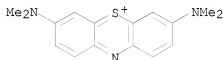
fluoroalkylsulfonyl, acyl, polymer chain, etc.; Y1-5 = CO, SO<sub>2</sub>, etc.; M = Li, K, ammonium, etc.] were prepared for use as reaction catalysts, dyes, and photosensitizers. Thus, III was prepared via condensation of 1-butyliisocyanate, 1-propanamine, and malonyl dichloride to form 1-propyl-3-Bu barbituric acid, which was the reacted with trifluoromethanesulfonyl chloride followed by anhydrous LiCl.

IT 7060-82-4DP, ion exchange products with acrylonitrile 5-(4-styrenesulfonyl)-2,2-trifluoromethyl-1,3-dioxolane-4,6-dione copolymer

RL: CAT (Catalyst use); NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
(preparation of salts of heterocyclic anions and their uses as ionic conductive materials)

RN 7060-82-4 CAPLUS

CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:229160 CAPLUS

DOCUMENT NUMBER: 124:328070

ORIGINAL REFERENCE NO.: 124:60595a,60598a

TITLE: Electrochemichromic solutions, processes for preparing and using the same, and devices manufactured with the same

INVENTOR(S): Varaprasad, Desaraju V.; Looman, Steven D.; Zhao, Mingtang; Habibi, Hamid R.; Lynam, Niall R.

PATENT ASSIGNEE(S): Donnelly Corp., USA

SOURCE: U.S., 32 pp., Cont.-in-part of U.S. 5, 239, 405.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5500760	A	19960319	US 1992-935784	19920827 <--
US 5239405	A	19930824	US 1991-756342	19910906
EP 531143	A2	19930310	EP 1992-308022	19920904 <--
EP 531143	A3	19931020		
R: DE, FR, GB, IE, IT				
JP 07216349	A	19950815	JP 1992-238612	19920907 <--
US 5424865	A	19950613	US 1993-61742	19930117 <--
US 5611966	A	19970318	US 1995-458080	19950601 <--
US 5985184	A	19991116	US 1997-956198	19971022 <--
US 6143209	A	20001107	US 1999-325712	19990604 <--
PRIORITY APPLN. INFO.:			US 1991-756342	A2 19910906 <--
			US 1992-935784	A 19920827 <--
			EP 1992-308022	W 19920904 <--
			US 1993-61742	A3 19930117 <--
			US 1995-458080	A3 19950601 <--
			US 1997-819652	B1 19970317 <--
			US 1997-956198	A1 19971022 <--

OTHER SOURCE(S): MARPAT 124:328070

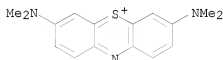
AB Electrochromic solns. capable of color change when a potential is applied comprise at least one anodic compound, said anodic compound having been previously contacted with a redox agent such that said anodic compound exists in a different valence state than prior to having been contacted with said redox agent, at least one cathodic compound, and a solvent wherein the redox potential of the anodic compound in the different valence state is greater than the redox potential of the cathodic compound while in contact with the solvent. Electrochromic devices (e.g., mirrors, glazings, partitions, filters, displays, and lenses) employing the solns. in a cell are also described.

IT 7060-82-4

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)  
(electrochromic solns. using prereduced anodic compds. and devices using them)

RN 7060-82-4 CAPLUS

CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)



REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:229898 CAPLUS

DOCUMENT NUMBER: 120:229898

ORIGINAL REFERENCE NO.: 120:40549a, 40552a

TITLE: Electrochromic solutions, processes for preparing and using the same, and devices manufactured with the same

INVENTOR(S): Varaprasad, Desaraju V.; Habibi, Hamid R.; Looman, Steven D.; Lynam, Niall R.; Zhao, Mingtang

PATENT ASSIGNEE(S): Donnelly Corp., USA

SOURCE: Eur. Pat. Appl., 43 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

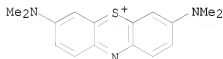
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 531143	A2	19930310	EP 1992-308022	19920904 <--
EP 531143	A3	19931020		
R: DE, FR, GB, IE, IT				
US 5239405	A	19930824	US 1991-756342	19910906
US 5500760	A	19960319	US 1992-935784	19920827 <--
JP 07216349	A	19950815	JP 1992-238612	19920907 <--
US 5611966	A	19970318	US 1995-458080	19950601 <--
US 5985184	A	19991116	US 1997-956198	19971022 <--
US 6143209	A	20001107	US 1999-325712	19990604 <--
PRIORITY APPLN. INFO.:				
			US 1991-756342	A 19910906 <--
			US 1992-935784	A 19920827 <--
			EP 1992-308022	W 19920904 <--
			US 1993-61742	A3 19930117 <--
			US 1995-458080	A3 19950601 <--

US 1997-819652      B1 19970317 <--  
US 1997-956198      A1 19971022 <--

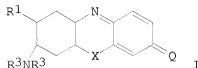
OTHER SOURCE(S):      MARPAT 120:229898  
AB    Electrochromic solns. are described which comprise  $\geq 1$  anodic compound which has had its valence state changed by contact with a redox agent,  $\geq 1$  cathodic compound and a solvent; the redox potential of the anodic compound is greater than that of the cathodic compound when in contact with the solvent. Devices (e.g., adjustable mirrors) employing the solns. in conjunction with a cell provided with electrodes are also described.  
IT    7060-82-4  
      RL: PRP (Properties)  
         (electrochromic solns. containing)  
RN    7060-82-4 CAPLUS  
CN    Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)



L6    ANSWER 6 OF 9    CAPLUS    COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER:      1987:159630    CAPLUS  
DOCUMENT NUMBER:      106:159630  
ORIGINAL REFERENCE NO.:    106:25947a,25950a  
TITLE:      Electrolyte additive for lithium-sulfur dioxide electrochemical cells  
INVENTOR(S):      Thrash, Robert J.; Connolly, John F.  
PATENT ASSIGNEE(S):      Amoco Corp., USA  
SOURCE:      U.S., 8 pp.  
              CODEN: USXXAM  
DOCUMENT TYPE:      Patent  
LANGUAGE:      English  
FAMILY ACC. NUM. COUNT:    1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4643958	A	19870217	US 1985-775316	19850912
AU 8662081	A	19870319	AU 1986-62081	19860829 <--
EP 215634	A1	19870325	EP 1986-306967	19860910 <--
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 62097272	A	19870506	JP 1986-214988	19860911 <--
PRIORITY APPLN. INFO.:			US 1985-775316	A 19850912 <--

GI



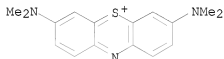
AB    A nonaq. conductive liquid comprises a SO2 solution of  $\geq 1$  Li salt and  $\geq 1$  quinone imine dye free of acidic H atoms and comprising a component of I (R1 = H or C1-5 alkyl; X = O or S; Q = O or N+R4R5; R2, R3, R4, and R5 = C1-5 alkyl). A battery comprises a Li anode, a cathode, and a nonaq. conductive liquid electrolyte of a SO2 cathode depolarizer,

≥1 dissolved Li salt, and a minor amount of ≥1 quinone imine dye I free of acidic H atoms or an organic cation, especially cation of methylene blue. A secondary battery was constructed which contained 2 porous C electrodes (a cathode current collector and a reference electrode) and a 1.02-mm Li foil anode. The electrolyte was liquid SO<sub>2</sub>, which was 0.02M in tris(2,2'-bipyridine)Mn(ClO<sub>4</sub>)<sub>2</sub> and saturated in LiClO<sub>4</sub>. The battery was subjected to a series of charge-discharge cycles and the polarization at the cathode during charge was 460 mV (uncor. for solution current + resistance drop and measured with stirring of the electrolyte). The polarization at the cathode during charging decreased to 50 mV in the presence of 0.05 M methylene blue (with ClO<sub>4</sub><sup>-</sup> counteranion).

IT 7060-82-4, Methylene blue cation  
 RL: USES (Uses)  
 (battery electrolyte containing, lithium-sulfur dioxide)

RN 7060-82-4 CAPLUS

CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2009 ACS ON SIN

ACCESSION NUMBER: 1984:70082 CAPLUS

DOCUMENT NUMBER: 100:70082

ORIGINAL REFERENCE NO.: 100:10679a,10682a

TITLE: Antistatic compositions and sheet materials formed therefrom

INVENTOR(S): Balchunis, Robert J.; Sher, Frank T.

PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA

SOURCE: Eur. Pat. Appl., 47 pp.  
 CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

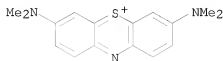
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 91741	A1	19831019	EP 1983-301525	19830318 <--
EP 91741	B1	19860604		
R: DE, FR, GB, IT				
US 4463114	A	19840731	US 1982-363870	19820331
JP 58180564	A	19831022	JP 1983-54972	19830330 <--
US 4532185	A	19850730	US 1984-608388	19840509 <--
PRIORITY APPLN. INFO.:			US 1982-363870	A 19820331 <--

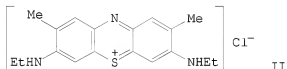
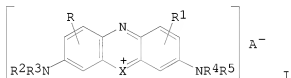
AB An aqueous composition contains a hydroxyorganosilane hydrolyzate, organosilanol sulfonic acid or its salt, and an acid catalyst. Upon curing, the composition yields a conductive siloxane coating with antistatic, antifogging, and cation-exchange properties. Thus, aqueous solution of  $\gamma$ -glycidioxypropyltrimethoxysilane hydrolyzate, (HO)3Si(CH<sub>2</sub>)3OCH<sub>2</sub>CH(OH)CH<sub>2</sub>SO<sub>3</sub>H [70869-38-4], and hexafluoroantimonic acid was applied to a poly(vinylidene chloride) [9002-85-1]-primed polyethylene terephthalate [25038-59-9] film and cured at 90° for ≥30 min to give a film having surface resistivity 10<sup>8</sup>-10<sup>9</sup> Ω/cm<sup>2</sup>, adequate cation-exchange capacity (methylene blue

absorption), and initial static decay time 0.04-0.6 s.  
 IT 7060-82-4D, reaction products with silanols  
 RL: USES (Uses)  
 (coatings containing, antistatic)  
 RN 7060-82-4 CAPLUS  
 CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)



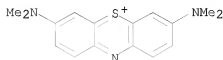
L6 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1978:144315 CAPLUS  
 DOCUMENT NUMBER: 88:144315  
 ORIGINAL REFERENCE NO.: 88:22627a,22630a  
 TITLE: Electrophotographic toners  
 INVENTOR(S): Mitsuhashi, Yasuo; Miyamae, Tatsuo  
 PATENT ASSIGNEE(S): Canon K. K., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52113738	A	19770924	JP 1976-30484	19760319 <--
JP 55010907	B	19800319		
PRIORITY APPLN. INFO.: GI			JP 1976-30484	A 19760319 <--



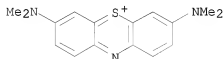
AB Pos. chargeable toners contain a binder resin and a lake of a dye of the general structure I (X = O, S; R, R' = H, lower alkyl, lower alkoxy; R2, R3, R4, R5 = H, lower alkyl; A- = anion). The lake has good heat, weathering, and moisture resistances, and the toners prepared from the lake exhibit stable chargeability. Thus, polystyrene (average mol. weight 3000) 100 and a phosphomolybdic-tungstic acid lake of II 4 parts were melt-kneaded, cooled, and pulverized to give an electrophotog. toner (3-20  $\mu$  particle size). The toner 10 and Fe powder 90 parts were mixed to give an electrophotog. developer (the triboelec. charge of the toner was +5.56  $\mu$ coulomb/g) which gave  $\geq 20,000$  high quality copies having blue

images.  
 IT 7060-82-4D, molybdotungstophosphate  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. toners containing)  
 RN 7060-82-4 CAPLUS  
 CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)



L6 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1971:100602 CAPLUS  
 DOCUMENT NUMBER: 74:100602  
 ORIGINAL REFERENCE NO.: 74:16387a,16390a  
 TITLE: Stable concentrated solutions of cationic dyes  
 INVENTOR(S): Friedrich, Herbert; Hansel, Albert  
 PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.  
 SOURCE: Ger. Offen., 17 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	DE 1923123	A	19701126	DE 1969-1923123	19690507 <--
PRIORITY APPLN. INFO.:				DE 1969-1923123	19690507 <--
AB	The title solns. containing 25-40% dye were prepared by dissolving a cationic dye, e.g. methylene blue, in water containing 4-RC6H4SO3H (R = H or Me). HCO2H and(or) MeCH(OH)CH2OH could also be added. Eleven dye solns. were prepared				
IT	7060-82-4				
	RL: USES (Uses)				
	(stabilized solns. of)				
RN	7060-82-4				
CN	Phenothiazin-5-ium, 3,7-bis(dimethylamino)- (CA INDEX NAME)				



=> fil stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	55.00	193.55
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-7.38	-7.38

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	1.33	194.88
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	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-7.38

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DICTIONARY FILE UPDATES: 15 MAR 2009 HIGHEST RN 1121544-94-2

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experimental property data in the original document. For information  
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<http://www.cas.org/support/stngen/stndoc/properties.html>

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chain nodes :  
15 16 17 18 19 20  
ring nodes :  
1 2 3 4 5 6 7 8 9 10 11 12 13 14



```

chain bonds :
2-15 13-16 15-19 15-20 16-17 16-18
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-14 11-12 12-13
13-14
exact/norm bonds :
2-15 13-16 15-19 15-20 16-17
exact bonds :
16-18
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-14 11-12 12-13
13-14
isolated ring systems :
containing 1 :

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G1:H,Cb,Ak

Match level :

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1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS

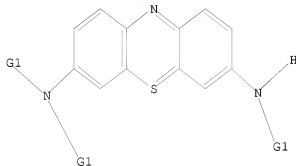
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L7 HAS NO ANSWERS

L7 STR



G1 H,Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 75 TO ITERATE

100.0% PROCESSED 75 ITERATIONS

25 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 981 TO 2019

PROJECTED ANSWERS: 200 TO 800

L8 25 SEA SSS SAM L7

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SEARCH TIME: 00.00.01

L9 430 SEA SSS FUL L7

=> fil cap		
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CA SUBSCRIBER PRICE	0.00	-7.38

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FILE COVERS 1907 - 16 Mar 2009 VOL 150 ISS 12  
FILE LAST UPDATED: 15 Mar 2009 (20090315/ED)

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FILE 'REGISTRY' ENTERED AT 17:35:43 ON 16 MAR 2009

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L3 346 S L1 FAM FULL  
L4 9 S L1 EXA FULL

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L5 102 S L4  
L6 9 S L4 AND (PRY<2004)

FILE 'STNGUIDE' ENTERED AT 17:41:12 ON 16 MAR 2009

FILE 'REGISTRY' ENTERED AT 17:52:38 ON 16 MAR 2009  
STRUCTURE UPLOADED

L7 25 S L7 SSS SAM  
L8 430 S L7 SSS FULL

FILE 'CAPLUS' ENTERED AT 17:53:15 ON 16 MAR 2009

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3411 L9  
4737903 PREP/RL  
L10 194 L9/PREP  
(L9 (L) PREP/RL)

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4268391 PRY<2004  
L11 28 L10 AND (PRY<2004)

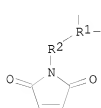
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L11 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

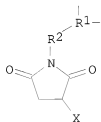
ACCESSION NUMBER: 2004:904111 CAPLUS  
DOCUMENT NUMBER: 141:376801  
TITLE: Functional polymer compounds having pendant maleimide group to which amino- or mercapto-containing biomolecules are added, and biosensors having the compounds  
INVENTOR(S): Hagiwara, Tokio; Uchiyama, Shunichi; Hasebe, Yasushi; Kaneko, Hiroko; Suda, Yoshihisa; Yamada, Kunio  
PATENT ASSIGNEE(S): Tsukuba Busshitsu Jyoho Kenkyusho Y. K., Japan; Mitsubishi Pencil Co., Ltd.  
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004300328	A	20041028	JP 2003-96624	20030331 <--
PRIORITY APPLN. INFO.:			JP 2003-96624	20030331 <--

GI



I



II

AB Biomols. having primary or secondary amino or thiol group are added to at least a part of repeating unit I [R1 = CHCH2, CH(CH2)mO, CH(CH2)nNH, to which CR3R4CR5R6, [(CH2)m+1O]k, and/or [(CH2)n+1NH]k is further linked

(R3-R6 = H, alkyl, aryl, wherein alkyl and aryl may contain O or N; m = 1-3; n = 1, 2; k ≥ 1); R2 = C6H4, OR7 (R7 = alkylene which may contain O or N)] to give functional polymer compds. having repeating unit II (R1, R2 = same as above; X = group formed by removing H from the primary or secondary amino or SH of the biomols.). The biosensors comprise a substrate and the functional polymer compds. fixed chemical or phys. on the substrate. Thus, a carbon felt was impregnated with a CHCl3 solution containing poly(maleimidostyrene) (preparation given), dried, soaked

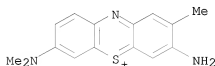
in a urease solution, and attached to a gas-permeable membrane of a CO2 electrode to give a urea sensor.

IT 92-31-9DP, Toluidine blue, addition reaction products with poly(maleimidostyrene) 581-64-6DP, Thionine, addition reaction products with poly(maleimidostyrene)  
 RL: ARG (Analytical reagent use); DEV (Device component use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(electron mediator, plastic formed carbon electrode coated with; polymers having pendant maleimide group to which NH2- or SH-containing biomols. such as enzymes are added, and biosensors having the functional polymers)

RN 92-31-9 CAPLUS

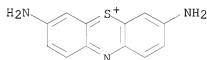
CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 581-64-6 CAPLUS

CN Phenothiazin-5-ium, 3,7-diamino-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

L11 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:991270 CAPLUS

DOCUMENT NUMBER: 140:47513

TITLE: Preparation of Toluidine Blue O drug for in vivo staining and chemotherapeutic treatment of dysplastic tissues

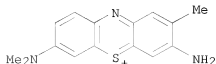
INVENTOR(S): Okolotowicz, Karl

PATENT ASSIGNEE(S): Zila Inc., USA

SOURCE: PCT Int. Appl., 42 pp.

DOCUMENT TYPE: CODEN: PIXXD2  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: English  
 PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003103569	A2	20031218	WO 2002-US17720	20020604
WO 2003103569	A3	20040521		
W: AU, BR, CN, CZ, HU, IL, IN, JP, KR, MX, NO, NZ, PL, RU, SG, SK, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
AU 2002312319	A1	20031222	AU 2002-312319	20020604 <--
EP 1534346	A2	20050601	EP 2002-739681	20020604 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
CN 1627961	A	20050615	CN 2002-829090	20020604 <--
CN 1302815	C	20070307		
JP 2005535605	T	20051124	JP 2004-510690	20020604 <--
NZ 537344	A	20070223	NZ 2002-537344	20020604 <--
MX 2004012031	A	20050307	MX 2004-12031	20041202 <--
IN 2004DN03974	A	20071221	IN 2004-DN3974	20041214 <--
US 20060110326	A1	20060525	US 2005-516352	20050720 <--
PRIORITY APPLN. INFO.: WO 2002-US17720 A 20020604 <--				
AB	The invention comprises an improved process for preparing TBO drug products includes the steps: (1) synthesizing an indamine; (2) converting the indamine into an S-indaminyl thiosulfate; and (3) adding an oxidizing catalyst, complexing agent, and an acid to the S-indaminyl thiosulfate to formulate TBO and C-4-Me regioisomer, and derivs. thereof. The invention further comprises new compns. that are useful for detecting dysplastic tissue, as well as, treating dysplastic tissue, e.g., TBO products. N,N-dimethyl-p-phenylenediamine as a starting material results in a TBO product composition, whereas N-dimethyl-p-phenylenediamine as a starting material results in a TBO demethylated product composition. The invention further comprises an improved PLC method for analyzing the improved TBO drug product, the improvement comprising the addition of an ion-pair reagent in a first mobile phase and forming a second mobile phase composition comprising 50% alc. by volume			
IT	92-31-9P, Toluidine Blue O RL: ANT (Analyte); DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of Toluidine Blue O drug for in vivo staining and chemotherapeutic treatment of dysplastic tissues)			
RN	92-31-9 CAPLUS			
CN	Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-, chloride (1:1) (CA INDEX NAME)			



● Cl-

## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:202518 CAPLUS

DOCUMENT NUMBER: 138:201326

TITLE: Light-stabilized in vivo stain composition and method of manufacture

INVENTOR(S): Burkett, Douglas D.

PATENT ASSIGNEE(S): Zila, Inc., USA

SOURCE: PCT Int. Appl., 11 pp.

CODEN: PIXXD2

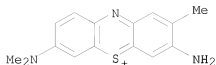
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003020323	A1	20030313	WO 2001-US26805	20010828
W: AU, CA, CN, IN, JP, KR, MX, NO, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
CA 2458613	A1	20030313	CA 2001-2458613	20010828 <--
AU 2001288456	A1	20030318	AU 2001-288456	20010828 <--
AU 2001288456	B2	20080131		
EP 1423151	A1	20040602	EP 2001-968193	20010828 <--
EP 1423151	B1	20081231		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
CN 1545425	A	20041110	CN 2001-823584	20010828 <--
CN 1269531	C	20060816		
JP 2005507439	T	20050317	JP 2003-524628	20010828 <--
AT 419016	T	20090115	AT 2001-968193	20010828 <--
NO 2003001866	A	20030624	NO 2003-1866	20030425 <--
US 20040247695	A1	20041209	US 2004-487329	20040217 <--
US 7462346	B2	20081209		
MX 2004001644	A	20050826	MX 2004-1644	20040223 <--
IN 2004DN00415	A	20060310	IN 2004-DN415	20040223 <--
PRIORITY APPLN. INFO.: WO 2001-US26805 W 20010828 <--				
AB	Photochem. demethylation reactions in solns. of thiazine dyes, in which the dye mols. act as both sensitizer and substrate, are reduced by quenching triple-state dye mols., returning them to the unreactive ground state. In particular the invention contemplates light-stabilized tolonium chloride (TC) dye compns. and their manufacture The prior art use of such loosely defined TC resulted in anomalous clin. observations and serious problems in obtaining necessary regulatory clearances to manufacture and market such products for use in human diagnostic procedures. In addition to the problem of variable initial composition, prior art TC and other thiazine biol. stains were subject to time-related variations in composition			
IT	92-31-9P, Tolonium chloride			
	RL: BUU (Biological use, unclassified); PRP (Properties); PUR (Purification or recovery); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)			
	(light-stabilized in vivo stain composition and method of manufacture)			
RN	92-31-9 CAPLUS			
CN	Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-, chloride (1:1) (CA INDEX NAME)			



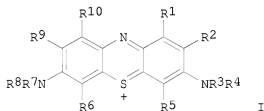
● C1-

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2002:974314 CAPLUS  
 DOCUMENT NUMBER: 138:57472  
 TITLE: Phenothiazinium dye photosensitizers, their production and their use to reduce pathogenic contaminants  
 INVENTOR(S): Wainwright, Mark  
 PATENT ASSIGNEE(S): University of Central Lancashire, UK  
 SOURCE: Brit. UK Pat. Appl., 62 pp.  
 CODEN: BAXXDU  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2373787	A	20021002	GB 2001-5730	20010308 <--
PRIORITY APPLN. INFO.:			GB 2001-5730	20010308 <--
OTHER SOURCE(S):	MARPAT	138:57472		

GI



I

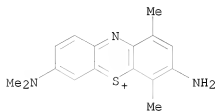
AB Phenothiazinium photosensitizers (I; R1, R2, R5, R6, R9, R10 = H, alkoxy, halogen, or optionally substituted lower alkyl, alkenyl, or alkynyl; R3, R4, R7, R8 = H, or optionally substituted lower alkyl, alkenyl, or alkynyl) are obtained for use as microbicidal agents, generating active oxygen upon photoirradn. In an example, N,N-dimethyl-p-phenylenediamine sulfate was treated with Na thiosulfate to give 2-amino-5-(dimethylamino)benzenethiosulfonic acid. Cyclization of this intermediate with m-toluidine gave a dark purple phenothiazinium product.

IT 479410-78-1P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (black dye; production of phenothiazinium dye photosensitizers for use on pathogenic contaminants)

RN 479410-78-1 CAPLUS  
 CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-1,4-dimethyl-, sulfate (1:1)  
 (CA INDEX NAME)

CM 1

CRN 479410-77-0  
 CMF C16 H18 N3 S



CM 2

CRN 14996-02-2  
 CMF H O4 S

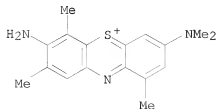


IT 479410-74-7P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (blue-black dye; production of phenothiazinium dye photosensitizers for use on pathogenic contaminants)

RN 479410-74-7 CAPLUS  
 CN Phenothiazin-5-ium, 7-amino-3-(dimethylamino)-1,6,8-trimethyl-, sulfate (1:1) (CA INDEX NAME)

CM 1

CRN 479410-73-6  
 CMF C17 H20 N3 S



CM 2

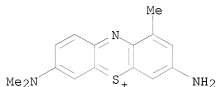
CRN 14996-02-2  
CMF H O4 S



IT 479410-62-3P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(dark purple dye; production of phenothiazinium dye photosensitizers for use on pathogenic contaminants)  
RN 479410-62-3 CAPLUS  
CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-1-methyl-, sulfate (1:1) (CA INDEX NAME)

CM 1

CRN 479410-61-2  
CMF C15 H16 N3 S



CM 2

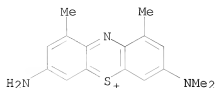
CRN 14996-02-2  
CMF H O4 S



IT 479410-66-7P 479410-76-9P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(purple dye; production of phenothiazinium dye photosensitizers for use on pathogenic contaminants)  
RN 479410-66-7 CAPLUS  
CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-1,9-dimethyl-, sulfate (1:1) (CA INDEX NAME)

CM 1

CRN 479410-65-6  
CMF C16 H18 N3 S



CM 2

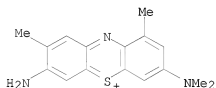
CRN 14996-02-2  
CMF H O4 S



RN 479410-76-9 CAPLUS  
CN Phenothiazin-5-ium, 7-amino-3-(dimethylamino)-1,8-dimethyl-, sulfate (1:1)  
(CA INDEX NAME)

CM 1

CRN 479410-75-8  
CMF C16 H18 N3 S



CM 2

CRN 14996-02-2  
CMF H O4 S



IT 479410-72-5P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(purple-black dye; production of phenothiazinium dye photosensitizers for use on pathogenic contaminants)

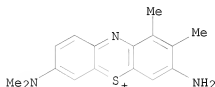
RN 479410-72-5 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-1,2-dimethyl-, sulfate (1:1)  
(CA INDEX NAME)

CM 1

CRN 479410-71-4

CMF C16 H18 N3 S



CM 2

CRN 14996-02-2

CMF H O4 S



L11 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:564838 CAPLUS

DOCUMENT NUMBER: 135:134287

TITLE: In vivo stain compounds and methods of use to identify dysplastic tissue

INVENTOR(S): Burkett, Douglas D.

PATENT ASSIGNEE(S): Zila, Inc., USA

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001054696	A1	20010802	WO 2000-US2602	20000131
W:	AU, BR, CA, CN, CZ, HU, IL, IN, JP, KR, MX, NO, PL, SG, SK, TR, US, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE			
CA 2366759	A1	20010802	CA 2000-2366759	20000131 <--
AU 2000036956	A	20010807	AU 2000-36956	20000131 <--
AU 784639	B2	20060518		
EP 1165087	A1	20020102	EP 2000-915730	20000131 <--
EP 1165087	B1	20050907		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,			

IE, FI

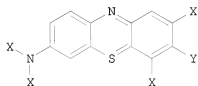
BR 2000009427	A	20020716	BR 2000-9427	20000131 <--
HU 2002001634	A2	20020928	HU 2002-1634	20000131 <--
JP 2003520816	T	20030708	JP 2001-554680	20000131 <--
AT 303810	T	20050915	AT 2000-915730	20000131 <--
CN 1219515	C	20050921	CN 2000-805853	20000131 <--
ES 2248061	T3	20060316	ES 2000-915730	20000131 <--
TW 250157	B	20060301	TW 2000-89103482	20000229 <--
ZA 2001007818	A	20020923	ZA 2001-7818	20010921 <--
NO 2001004720	A	20011127	NO 2001-4720	20010928 <--
NO 322012	B1	20060807		
MX 2001009797	A	20021104	MX 2001-9797	20010928 <--
IN 2001DN00885	A	20050311	IN 2001-DN885	20010928 <--
US 6830743	B1	20041214	US 2002-937632	20020122 <--
			WO 2000-US2602	W 20000131 <--

PRIORITY APPLN. INFO.:

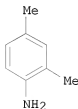
OTHER SOURCE(S):

MARPAT 135:134287

GI



I



II

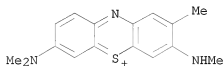
AB Comps. having the structural formula I wherein X is hydrogen, Me, or Y; Y is -NH-R or hydrogen; and R is Me or formula II are useful as in vivo stains for the detection of dysplastic tissue.

IT 47078-64-8P 352005-60-8P 352005-61-9P  
352005-62-0P 352005-63-1P 352005-65-3P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(In vivo stain comps. and methods of use to identify dysplastic tissue)

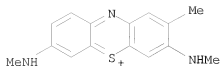
RN 47078-64-8 CAPLUS

CN Phenothiazin-5-ium, 7-(dimethylamino)-2-methyl-3-(methylamino)- (CA INDEX NAME)



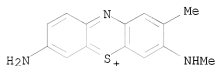
RN 352005-60-8 CAPLUS

CN Phenothiazin-5-ium, 2-methyl-3,7-bis(methylamino)- (CA INDEX NAME)



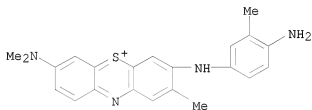
RN 352005-61-9 CAPLUS

CN Phenothiazin-5-ium, 7-amino-2-methyl-3-(methylamino)- (CA INDEX NAME)



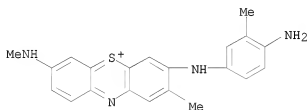
RN 352005-62-0 CAPLUS

CN Phenothiazin-5-ium, 3-[(4-amino-3-methylphenyl)amino]-7-(dimethylamino)-2-methyl- (CA INDEX NAME)



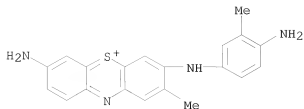
RN 352005-63-1 CAPLUS

CN Phenothiazin-5-ium, 3-[(4-amino-3-methylphenyl)amino]-2-methyl-7-(methylamino)- (CA INDEX NAME)



RN 352005-65-3 CAPLUS

CN Phenothiazin-5-ium, 7-amino-3-[(4-amino-3-methylphenyl)amino]-2-methyl- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2009 ACS ON STN  
 ACCESSION NUMBER: 2001:145288 CAPLUS  
 DOCUMENT NUMBER: 134:194557  
 TITLE: Production of toluidine blue O  
 INVENTOR(S): Burkett, Douglas D.  
 PATENT ASSIGNEE(S): Zila, Inc., USA  
 SOURCE: U.S., 7 pp., Cont.-in-part of Appl. No.  
 PCT/US97/20981.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6194573	B1	20010227	US 1998-110788	19980706 <--
WO 9925388	A1	19990527	WO 1997-US20981	19971113
W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NO, NZ, PL, RO, SG, SK,				
TR, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
IL 125602	A	20070920	IL 1998-125602	19980730 <--
JP 11209357	A	19990803	JP 1998-295607	19981016 <--
CA 2250731	A1	19990513	CA 1998-2250731	19981021 <--
CA 2250731	C	20060314		
AU 9889456	A	19990603	AU 1998-89456	19981021 <--
AU 757963	B2	20030313		
EP 966957	A2	19991229	EP 1998-308824	19981028 <--
EP 966957	A3	20001206		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO				
EP 1944607	A2	20080716	EP 2008-5948	19981028 <--
EP 1944607	A3	20081008		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
SK 285184	B6	20060803	SK 1998-1512	19981104 <--
CZ 299736	B6	20081105	CZ 1998-3555	19981104 <--
HU 9802577	A2	19990728	HU 1998-2577	19981106 <--
HU 9802577	A3	20000428		
CN 1225278	A	19990811	CN 1998-124142	19981110 <--
CN 1188173	C	20050209		
PL 192629	B1	20061130	PL 1998-329658	19981110 <--
PL 193407	B1	20070228	PL 1997-3773	19981110 <--
NO 9805260	A	19990514	NO 1998-5260	19981111 <--
BR 9804625	A	20000321	BR 1998-4625	19981112 <--
MX 9809501	A	20000131	MX 1998-9501	19981113 <--
US 20010007904	A1	20010712	US 2001-759808	20010111 <--
US 6372904	B2	20020416		
US 20020111501	A1	20020815	US 2002-96468	20020311 <--

IN 2005DE01294 A 20061201 IN 2005-DE1294 20050519 <--  
 IN 2005DE01867 A 20070525 IN 2005-DE1867 20050719 <--  
 PRIORITY APPLN. INFO.: WO 1997-US20981 A2 19971113 <--

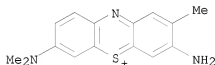
IN 1997-DE3483 A3 19971205 <--  
 US 1998-110788 A 19980706 <--  
 EP 1998-308824 A3 19981028 <--  
 IN 1998-DE3727 A3 19981211 <--  
 US 2001-759808 A1 20010111 <--

AB The production of 2-amino-5-(dimethylamino)phenyl thiosulfonic acid (I) comprises the step of oxidizing N,N-dimethyl-p-phenylenediamine in the presence of a source of thiosulfate ions, while maintaining the temperature of the reaction mixture not higher than about 10°C. I is useful as an intermediate in the synthesis of toluidine blue O. A process for manufacturing toluidine blue O with improved yield includes the step of preparing I according to this procedure and oxidizing I with o-toluidine to form indaminethiosulfonic acid, followed by further oxidation and ring closure to give the title biol. staining agent.

IT 92-31-9P, Toluidine Blue O  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (staining agent; production of toluidine blue O in improved yield)

RN 92-31-9 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-, chloride (1:1)  
 (CA INDEX NAME)



● Cl<sup>-</sup>

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 1999:344865 CAPLUS

DOCUMENT NUMBER: 130:349378

TITLE: Toluidine blue O in vivo stain composition, process of manufacture, and methods of use to identify dysplastic tissue

INVENTOR(S): Burkett, Douglas D.

PATENT ASSIGNEE(S): Zila, Inc., USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

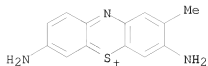
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

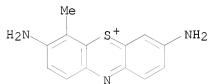
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9925388	A1	19990527	WO 1997-US20981	19971113
W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NO, NZ, PL, RO, SG, SK, TR, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9853574	A	19990607	AU 1998-53574	19971113 <--

IN 1997DE03483	A	20051118	IN 1997-DE3483	19971205 <--
TW 527185	B	20030411	TW 1998-87101438	19980204 <--
ZA 9802010	A	19981030	ZA 1998-2010	19980310 <--
US 6194573	B1	20010227	US 1998-110788	19980706 <--
IL 125602	A	20070920	IL 1998-125602	19980730 <--
JP 11209357	A	19990803	JP 1998-295607	19981016 <--
CA 2250731	A1	19990513	CA 1998-2250731	19981021 <--
CA 2250731	C	20060314		
AU 9889456	A	19990603	AU 1998-89456	19981021 <--
AU 757963	B2	20030313		
EP 966957	A2	19991229	EP 1998-308824	19981028 <--
EP 966957	A3	20001206		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO				
EP 1944607	A2	20080716	EP 2008-5948	19981028 <--
EP 1944607	A3	20081008		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
SK 285184	B6	20060803	SK 1998-1512	19981104 <--
CZ 299736	B6	20081105	CZ 1998-3555	19981104 <--
HU 9802577	A2	19990728	HU 1998-2577	19981106 <--
HU 9802577	A3	20000428		
CN 1225278	A	19990811	CN 1998-124142	19981110 <--
CN 1188173	C	20050209		
PL 192629	B1	20061130	PL 1998-329658	19981110 <--
PL 193407	B1	20070228	PL 1997-3773	19981110 <--
NO 9805260	A	19990514	NO 1998-5260	19981111 <--
TR 9802295	A2	20000621	TR 1998-2295	19981111 <--
BR 9804625	A	20000321	BR 1998-4625	19981112 <--
MX 9809501	A	20000131	MX 1998-9501	19981113 <--
US 6086852	A	20000711	US 1999-308760	19990520 <--
US 20010007904	A1	20010712	US 2001-759808	20010111 <--
US 6372904	B2	20020416		
US 20020111501	A1	20020815	US 2002-96468	20020311 <--
IN 2005DE01294	A	20061201	IN 2005-DE1294	20050519 <--
PRIORITY APPLN. INFO.:				
			WO 1997-US20981	A 19971113 <--
			IN 1997-DE3483	A3 19971205 <--
			US 1998-110788	A 19980706 <--
			EP 1998-308824	A3 19981028 <--
			US 2001-759808	A1 20010111 <--
AB	Novel biol. stain compns. are disclosed that are adapted for human in vivo topical application. In particular, novel toluidine blue O (TBO) dye products, products which contain TBO and specific TBO derivs. are disclosed. The organic dye content of the prior art TBO products which were com. available was relatively low. The new product (method of preparation given) contains the conformational isomers of TBO and N-demethylation derivs. of the isomers such that the ratio of the combined areas of the 254 nm HPLC peaks of the isomers to the combined areas of the peaks representing the N-demethylation derivs. is at least 6:1.			
IT	225091-68-9P 225091-69-0P			
	RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)			
	(N,N-demethylated derivative of conformational isomer of toluidine blue O; toluidine blue O in vivo stain composition, process of manufacture, and methods of use to identify dysplastic tissue)			
RN	225091-68-9 CAPLUS			
CN	Phenothiazin-5-ium, 3,7-diamino-2-methyl-, chloride (1:1) (CA INDEX NAME)			



● Cl<sup>-</sup>

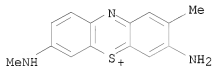
RN 225091-69-0 CAPLUS  
CN Phenothiazin-5-ium, 3,7-diamino-4-methyl-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

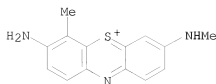
IT 225091-66-7P 225091-67-8P  
RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);  
USES (Uses)  
(N-demethylated derivative of conformational isomer of toluidine blue O; toluidine blue O in vivo stain composition, process of manufacture, and methods of use to identify dysplastic tissue)

RN 225091-66-7 CAPLUS  
CN Phenothiazin-5-ium, 3-amino-2-methyl-7-(methylamino)-, chloride (1:1) (CA INDEX NAME)



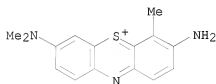
● Cl<sup>-</sup>

RN 225091-67-8 CAPLUS  
CN Phenothiazin-5-ium, 3-amino-4-methyl-7-(methylamino)-, chloride (1:1) (CA INDEX NAME)



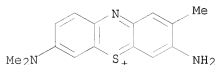
● Cl<sup>-</sup>

IT 225091-65-6P  
 RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);  
 USES (Uses)  
 (conformational isomer of toluidine blue O; toluidine blue O in vivo stain composition, process of manufacture, and methods of use to identify dysplastic tissue)  
 RN 225091-65-6 CAPLUS  
 CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-4-methyl-, chloride (1:1)  
 (CA INDEX NAME)



● Cl<sup>-</sup>

IT 92-31-9P, Toluidine blue O  
 RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);  
 USES (Uses)  
 (toluidine blue O in vivo stain composition, process of manufacture, and methods of use to identify dysplastic tissue)  
 RN 92-31-9 CAPLUS  
 CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-, chloride (1:1)  
 (CA INDEX NAME)



● Cl<sup>-</sup>

IT 21401-87-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)

(toluidine blue O in vivo stain composition, process of manufacture, and methods

of use to identify dysplastic tissue)

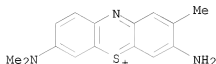
RN 21401-87-6 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-,  
trichlorozincate(1-) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 56109-24-1

CMF C15 H16 N3 S

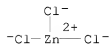


CM 2

CRN 23603-98-7

CMF C13 Zn

CCI CCS



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:189148 CAPLUS

DOCUMENT NUMBER: 130:238781

TITLE: Polyester toner composition for electrophotographic imaging systems

INVENTOR(S): Borzo, Marie; Chiang, Kophu; Choe, Eui-Won; Mikkilineni, Rao D.; Yoon, Hyun-Nam

PATENT ASSIGNEE(S): Hoechst Celanese Corporation, USA

SOURCE: PCI Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9911720	A1	19990311	WO 1998-US15454	19980728 <--
W: CA, JP, KR				
RW: AT, BE, CH, PT, SE	CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,			
US 6001980	A	19991214	US 1997-923394	19970903
EP 1009777	A1	20000621	EP 1998-937124	19980728 <--
R: DE, FR, GB				
JP 2001514320	T	20010911	JP 2000-508739	19980728 <--
US 6090516	A	20000718	US 1999-411761	19991004 <--

US 6090973 A 20000718 US 1999-411948 19991004 <--  
PRIORITY APPLN. INFO.: US 1997-923394 A 19970903 <--  
WO 1998-US15454 W 19980728 <--

OTHER SOURCE(S): MARPAT 130:238781

AB A toner composition for application in electrophotog. imaging systems comprises a free-flowing polyester dye powder which has superior stability and transparency, and one or more optional components such as a charge-control agent or a surfactant. Thus, reaction of 0.1 mol 2,6-diamino-6'-butoxy-3,3'-azodipyridine with 0.2 mol sebacoyl chloride in the presence of 0.2 mol MeONa gave a yellow azo diamide di-Me ester, which could be incorporated in a polyester to form a toner.

IT 221358-32-3P

RL: IMF (Industrial manufacture); PREP (Preparation)

(blue; colored monomer for polyester electrophotog. toner composition)

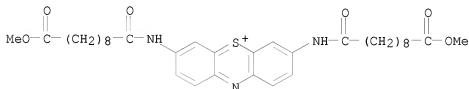
RN 221358-32-3 CAPLUS

CN Phenothiazin-5-ium, 3,7-bis[(10-methoxy-1,10-dioxodecyl)amino]-, acetate (1:1) (CA INDEX NAME)

CM 1

CRN 221358-31-2

CMF C34 H46 N3 O6 S



CM 2

CRN 71-50-1

CMF C2 H3 O2



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 28 CAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 1997:476258 CAPLUS

DOCUMENT NUMBER: 127:78231

ORIGINAL REFERENCE NO.: 127:14897a,14900a

TITLE: Fluorescent derivatives of paclitaxel and docetaxel with antineoplastic activity, method for producing them and their applications

INVENTOR(S): Amat Guerri, Francisco; Souto, Andre; Acuna Fernandez, Alberto Ulises; Andreu Morales, Jose Manuel; Barasoin Blasco, M. Isabel; Abal, Miguel

PATENT ASSIGNEE(S): Consejo Superior Investigaciones Cientificas, Spain

SOURCE: PCT Int. Appl., 16 pp.

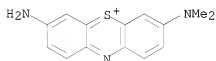
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Spanish

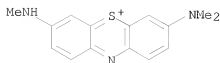
FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9719938	A1	19970605	WO 1996-ES231	19961129 <--
W: CA, JP, MX, NO, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
ES 2105983	A1	19971016	ES 1995-2361	19951129
ES 2105983	B1	19980701		
ES 2121549	A1	19981116	ES 1996-2522	19961129 <--
ES 2121549	B1	19990616		
PRIORITY APPLN. INFO.:			ES 1995-2361	A 19951129 <--
			ES 1996-2522	A 19961129 <--
AB	Intensively fluorescent derivs. have been synthesized from a substance used at present as anticancer (chemotherapy) agent, against ovarian and mammal tumors, and other tumors. Said derivs. enable to visualize the cellular target of said drug, since the derivatization does not modify the biol. activity. There is no existing compound which has the solubility, activity and fluorescence characteristics of the compds. disclosed in the present invention. Said derivs. may be used as fluorescence microscopy colorants specific to microtubules of the cytoskeleton in cells and other living organisms. Said derivs. have many applications in the anal. of cell anatomy and in clin. diagnosis.			
IT	531-53-3DP, Azure a, reaction products with docetaxel and paclitaxel derivs. 531-55-5DP, Azure b, reaction products with docetaxel and paclitaxel derivs. 581-64-6DP, Thionine, reaction products with docetaxel and paclitaxel derivs. RL: PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (applications of fluorescent derivs. of paclitaxel and docetaxel with antineoplastic activity and a method for producing them)			
RN	531-53-3 CAPLUS			
CN	Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-, chloride (1:1) (CA INDEX NAME)			



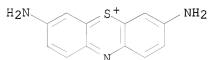
● C1-

RN 531-55-5 CAPLUS  
 CN Phenothiazin-5-ium, 3-(dimethylamino)-7-(methylamino)-, chloride (1:1)  
 (CA INDEX NAME)



● Cl<sup>-</sup>

RN 581-64-6 CAPLUS  
CN Phenothiazin-5-ium, 3,7-diamino-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

L11 ANSWER 10 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1995:285572 CAPLUS  
DOCUMENT NUMBER: 122:58179  
ORIGINAL REFERENCE NO.: 122:11221a,11224a  
TITLE: Preparation of pure phenothiazine dyes  
INVENTOR(S): Fiedeldei, Uwe  
PATENT ASSIGNEE(S): Germany  
SOURCE: Ger., 6 pp.  
CODEN: GWXXAW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4302013	C1	19940601	DE 1993-4302013	19930126 <--
PRIORITY APPLN. INFO.:			DE 1993-4302013	19930126 <--

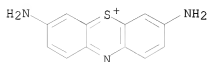
AB In the production of aminophenothiazinium compds. by phenothiazine nitration, reduction, oxidation, sulfonic amidation, and amine substitution, nitrous gases from the nitration are converted into nitrates and(or) nitrites by use of O and alkalis (thus avoiding the use of undesirable amines) and the amidation is conducted in the presence of inorg. base which shortens the reaction time and provides readily separated inorg. salt neutralization products. Thus, phenothiazine was nitrated with NaNO<sub>2</sub> and the resulting gases were bubbled with air through aqueous NaOH. The produced dinitro compound was reduced and the diamine converted to 3,7-diaminophenothiazinium chloride, the bis(toluenesulfonamide) of which was obtained using tosyl chloride and aqueous NaOH. In a final step, the diamine was treated with MeNH<sub>2</sub> to give 3,7-bis(methylamino)phenothiazinium chloride.

IT 581-64-6P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of pure phenothiazine dyes using alkaline neutralizing agents)

RN 581-64-6 CAPLUS

CN Phenothiazin-5-ium, 3,7-diamino-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

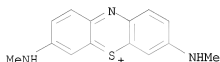
IT 34185-21-2P

RL: IMF (Industrial manufacture); PREP (Preparation)

(preparation of pure phenothiazine dyes using alkaline neutralizing agents)

RN 34185-21-2 CAPLUS

CN Phenothiazin-5-ium, 3,7-bis(methylamino)-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:236902 CAPLUS

DOCUMENT NUMBER: 112:236902

ORIGINAL REFERENCE NO.: 112:39967a,39970a

TITLE: Preparation of oxazine-urea and thiazine-urea derivative fluorescent labels for biochemical and clinical analyses

INVENTOR(S): Theodoropoulos, Spyros

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 12 pp. Cont.-in-part of U.S. Ser. No. 69,860, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

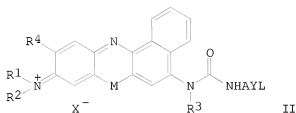
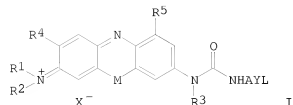
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 4873318	A	19891010	US 1987-110415	19871020 <--
US 4714763	A	19871222	US 1985-753937	19850711
PRIORITY APPLN. INFO.:			US 1985-753937	A2 19850711 <--
			US 1987-69860	A2 19870706 <--

OTHER SOURCE(S): MARPAT 112:236902

GI



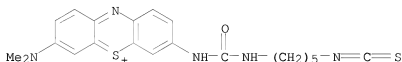
AB The title labels I, II [A = (CH<sub>2</sub>)<sub>n</sub>NHCO, (CH<sub>2</sub>)<sub>n</sub>N(R<sub>3</sub>)CO; (CH<sub>2</sub>)<sub>n</sub>N(R<sub>3</sub>)C:S, C(CH<sub>2</sub>CH<sub>2</sub>SH)CO, C(CH<sub>2</sub>CH<sub>2</sub>OH)HCO, C(CH<sub>2</sub>CO<sub>2</sub>H)HCO, C<sub>6</sub>H<sub>4</sub>T; R<sub>1</sub>-R<sub>3</sub> = H, C<sub>1</sub>-10 alkyl; T = CO, NR<sub>3</sub>, NHC:M; M = O, S; n = 0-20; L = antibody residue; R<sub>4</sub>, R<sub>5</sub> = R<sub>1</sub>, halogen, amino; X = organic or inorg. anion; Y = S, C<sub>1</sub>-12 primary or secondary amine residue] are prepared by reacting appropriate α,ω-difunctional alkanes with fluorescent dyes, and reacting the amino, mercapto, or hydroxy group-condensable label with the biol. analyte to be measured. Thus, a fluorescent label was prepared by reacting Nile blue A with HMDI to form an isocyanate group-containing derivative which could be condensed biomol. (no data).

IT 127350-13-4P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(manufacture of, as fluorescent label for biochem. and clin. anal. of biomols.)

RN 127350-13-4 CAPLUS

CN Phenothiazin-5-ium, 3-(dimethylamino)-7-[[[(5-isothiocyanatopentyl)amino]carbonyl]amino]-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1988:112473 CAPLUS

DOCUMENT NUMBER: 108:112473

ORIGINAL REFERENCE NO.: 108:18429a,18432a

TITLE: Preparation of novel oxazine ureas and thiazine urea chromophors as fluorescent labels for biochemical and

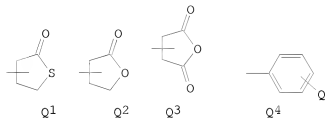
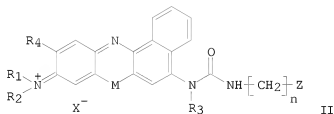
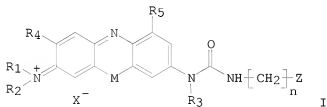
clinical analysis  
 INVENTOR(S): Theodoropoulos, Spyros  
 PATENT ASSIGNEE(S): Viomedics, Inc., USA  
 SOURCE: U.S., 8 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4714763	A	19871222	US 1985-753937	19850711
US 4873318	A	19891010	US 1987-110415	19871020 <--
EP 319620	A1	19890614	EP 1987-310858	19871210 <--

R: DE, GB, IT, NL

PRIORITY APPLN. INFO.: US 1985-753937 A2 19850711 <--  
 US 1987-69860 A2 19870706 <--

GI

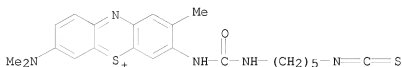


AB The title compds. (I and II; R1 - R3 = H, alkyl; R4, R5 = R1, halo, amino; X = organic or inorg. anion; Z = isocyanato, isothiocyanato, amino, or, when n = 0, Q1 - Q4; Q = isocyanato, isothiocyanato; M = O, S; n = 0-20) were prepared for fluorescent labeling of organic substrates in biol. and clin. anal. A mixture of Nile blue A and 1,6-diisocyanatohexane in pyridine was stirred for 48 h to give II (R1 = R2 = Et, R3 = R4 = R5 = H, M = O, Z = isocyanato, X = Cl, n = 6).

IT 113204-01-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as fluorescent label)

RN 113204-01-6 CAPLUS  
 CN Phenothiazin-5-ium, 7-(dimethylamino)-3-[[[(5-  
 isothiocyanatopentyl)amino]carbonylamino]-2-methyl-, chloride (1:1) (CA  
 INDEX NAME)



● Cl<sup>-</sup>

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1987:214636 CAPLUS

DOCUMENT NUMBER: 106:214636

ORIGINAL REFERENCE NO.: 106:34849a,34852a

TITLE: Soluble polymeric photosensitizers useful for  
 photooxidation reactions

INVENTOR(S): Sastre Munoz, Roberto; Mateo Lopez, Jose Luis; Botija  
 Gonzalez, Jose Manuel; Martinez Utrilla, Roberto; Amat  
 Guerri, Francisco; Lopez Gonzalez, Maria del Mar C.

PATENT ASSIGNEE(S): Consejo Superior de Investigaciones Cientificas, Spain

SOURCE: Span., 13 pp.

CODEN: SPXXAD

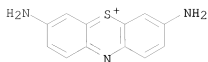
DOCUMENT TYPE: Patent

LANGUAGE: Spanish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

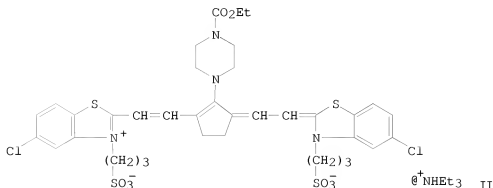
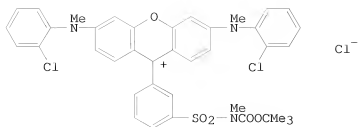
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ES 534653	A1	19851216	ES 1984-534653	19840727 <--
PRIORITY APPLN. INFO.:			ES 1984-534653	19840727 <--
AB Easily separable soluble polymer-bound photosensitizers are prepared by chloromethylation of polystyrene with ClCH <sub>2</sub> OMe in the presence of ZnCl <sub>2</sub> as catalyst, followed by reaction with a photosensitizing dye. A mixture of 5 g polystyrene, 50 mL ClCH <sub>2</sub> OMe, and 0.8 g ZnCl <sub>2</sub> was heated at 27-30° to introduce CH <sub>2</sub> Cl groups exclusively in the para position to an extent which varied with the reaction time. A chloromethylated polystyrene prepared by this method and containing 7% ClCH <sub>2</sub> groups was dissolved in DMF and condensed with Rose Bengal to introduce 0.8% of the photosensitizers groups. A solution of 0.240 g of this polymer in 1 l benzene was used to photochem. oxidize 1 g of 1,3-diphenylisobenzofuran completely to 1,2-dibenzoylbenzene in 6.5 min. The polymer-bound photosensitizer was easily precipitated by addition of pentane or methanol and could be reutilized without loss of efficiency. No photooxidn. occurred under similar conditions in the presence of free Rose Bengal, owing to its insoly. in benzene.				
IT 581-64-6DP, Thionine, reaction products with chloromethylated polystyrene				
RL: IMF (Industrial manufacture); PREP (Preparation) (manufacture of, as soluble photooxidn. catalysts)				
RN	581-64-6 CAPLUS			
CN	Phenothiazin-5-ium, 3,7-diamino-, chloride (1:1) (CA INDEX NAME)			



● Cl<sup>-</sup>

L11 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1986:562320 CAPLUS  
 DOCUMENT NUMBER: 105:162320  
 ORIGINAL REFERENCE NO.: 105:26024h,26025a  
 TITLE: Heat-sensitive element for use in a thermal imaging method  
 INVENTOR(S): Borrer, Alan B.; Ellis, Ernest W.; McGowan, Donald A.  
 PATENT ASSIGNEE(S): Polaroid Corp., USA  
 SOURCE: Eur. Pat. Appl., 77 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 174054	A2	19860312	EP 1985-201395	19850902 <--
EP 174054	A3	19870325		
EP 174054	B1	19890628		
R: BE, DE, FR, GB, NL				
US 4602263	A	19860722	US 1984-646771	19840904
CA 1273924	A1	19900911	CA 1985-484595	19850620 <--
JP 61066689	A	19860405	JP 1985-173956	19850807 <--
JP 05042359	B	19930628		
AU 8546514	A	19860313	AU 1985-46514	19850821 <--
AU 582183	B2	19890316		
US 4826976	A	19890502	US 1987-134600	19871218 <--
PRIORITY APPLN. INFO.:			US 1984-646771	A 19840904 <--
			US 1986-855446	A1 19860424 <--
OTHER SOURCE(S):	CASREACT 105:162320			
GI				



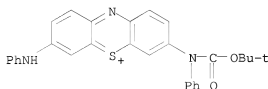
AB A thermal recording composition for forming color images is comprised of an organic compound containing  $\geq 1$  thermally unstable carbamate moiety which undergoes irreversible fragmentation to effect a visually discernible color shift from colorless to colored, colored to colorless, or one color to another. Thus, a poly(ethylene terephthalate) film support coated with a layer containing a polymer binder, a magenta dye (I), and an IR radiation-absorbing compound (II) was irradiated with a Kr laser (752 nm, 85 mW) at a recording rate of 708 in/s to give an image having transmission  $D_{\max}$  0.95 and  $D_{\min}$  0.10.

IT 104434-55-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

RN 104434-55-1 CAPLUS (preparation and reaction of, in preparation of dye for thermal recording)

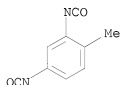
CN Phenothiazin-5-ium, 3-[[[(1,1-dimethylethoxy)carbonyl]phenylamino]-7-(phenylamino)-, chloride (1:1) (CA INDEX NAME)



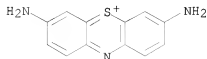
● Cl<sup>-</sup>

ORIGINAL REFERENCE NO.: 103:6155a,6158a  
 TITLE: Fluorescent polymer with good light resistance  
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 59187018	A	19841024	JP 1984-52099	19840321 <--
PRIORITY APPLN. INFO.:				JP 1984-52099	19840321 <--
AB	The title polymer was prepared by interfacial polymerization of TDI and a fluorescent compound, e.g., thionine, safranin T, Acridine Yellow and phenosafranin. Thus, thionine 2.92 parts (dissolved in 100 parts H <sub>2</sub> O) and 3.48 parts TDI (dissolved in 100 parts CHCl <sub>3</sub> ), were stirred 30 min. at 25° to give a polymer [53351-22-7]. The DMF solution of resulting polymer was exposed 90 min. to UV irradiation and showed decay ratio of fluorescence intensity 5.7%, compound with 59.1% for aqueous solution of thionine.				
IT	Phenosafranin-m-phenylenediamine-TDI copolymer [97287-39-3] was also prepared 53351-22-7P RL: PREP (Preparation) (preparation of, fluorescent, with good light resistance)				
RN	53351-22-7 CAPLUS				
CN	Phenothiazin-5-ium, 3,7-diamino-, chloride, polymer with 2,4-diisocyanato-1-methylbenzene (9CI) (CA INDEX NAME)				
CM	1				
CRN	584-84-9				
CMF	C9 H6 N2 O2				



CM 2  
 CRN 581-64-6  
 CMF C12 H10 N3 S . Cl

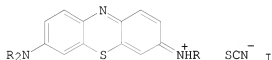


● Cl<sup>-</sup>

L11 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1985:20793 CAPLUS  
 DOCUMENT NUMBER: 102:20793  
 ORIGINAL REFERENCE NO.: 102:3397a,3400a  
 TITLE: Phenothiazinium dyes and their use as stains  
 INVENTOR(S): Heydolph, Sabine; Parr, Wolfgang; Heyl, Eduard  
 PATENT ASSIGNEE(S): HEYL Chemisch-Pharmazeutische Fabrik G.m.b.H. und Co.  
 K.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 16 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3305304	A1	19840816	DE 1983-3305304	19830216 <--
PRIORITY APPLN. INFO.: DE 1983-3305304 19830216 <--				
OTHER SOURCE(S): MARPAT 102:20793				

GI

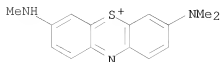


AB Phenothiazinium thiocyanate dyes of general formula I (R = H or Me), which are useful as stains for clin. samples (e.g., tissue sections, blood, or bone marrow smears) are prepared. Thus, for the preparation of Azure B thiocyanate (I; R = Me), useful for Romanowsky-Giemsa staining, 4-amino-N,N-dimethylaniline was oxidized in the presence of Na thiosulfate to form the benzenethiosulfonic acid which was coupled oxidatively with N-methylaniline, and the product was cyclized to the phenothiazinium Zn double salt. The salt was treated with HClO4 to form the perchlorate which then was treated with excess KSCN at raised temperature to give the product Azure B thiocyanate. Similar steps, starting with p-phenylenediamine and aniline, were used to prepare thionine thiocyanate (I; R = H) which is used for Papanicolaou staining.

IT 120194-60-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and conversion to perchlorate)  
 RN 120194-60-7 CAPLUS  
 CN Phenothiazin-5-ium, 3-(dimethylamino)-7-(methylamino)-,  
 (T-4)-tetrachlorozincate(2-) (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 29260-45-5  
 CMF C15 H16 N3 S

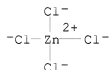


CM 2

CRN 15201-05-5

CMF C14 Zn

CCI CCS

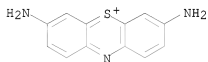


IT 581-64-6P 56109-48-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and conversion to thiocyanate)

RN 581-64-6 CAPLUS

CN Phenothiazin-5-ium, 3,7-diamino-, chloride (1:1) (CA INDEX NAME)



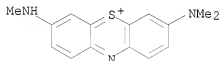
RN 56109-48-9 CAPLUS

CN Phenothiazin-5-ium, 3-(dimethylamino)-7-(methylamino)-, perchlorate (1:1)  
(CA INDEX NAME)

CM 1

CRN 29260-45-5

CMF C15 H16 N3 S



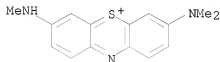
CM 2

CRN 14797-73-0

CMF C1 O4



IT 85169-01-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as stain)  
 RN 85169-01-3 CAPLUS  
 CN Phenothiazin-5-ium, 3-(dimethylamino)-7-(methylamino)-, thiocyanate (9CI)  
 (CA INDEX NAME)  
 CM 1  
 CRN 29260-45-5  
 CMF C15 H16 N3 S



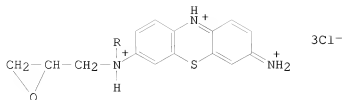
CM 2  
 CRN 302-04-5  
 CMF C N S



L11 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1981:570995 CAPLUS  
 DOCUMENT NUMBER: 95:170995  
 ORIGINAL REFERENCE NO.: 95:28597a,28600a  
 TITLE: Glycidyl group-containing dyes  
 PATENT ASSIGNEE(S): Tsuchida, Hidetoshi, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56077271	A	19810625	JP 1980-163213	19801121 <--
JP 60004853	B	19850207		
PRIORITY APPLN. INFO.:			JP 1980-163213	A 19801121 <--

GI



AB Polymeric dyes with good solubility are prepared by N-glycidylation (in some cases, with a bridging group) of amino group-containing dyes, followed by homopolymn., copolymn. with an alkylene oxide, or reaction with polyethylenimine. For example, thionine [581-64-6] was treated with epichlorohydrin [106-89-8] in DMF at 40° for 5 h in the absence of light to give bluish black I (R = H) [65544-09-4] and I (R = glycidyl) [65544-11-8] in 47.3 and 3% yields, resp. The polymerization of I (R = H) in

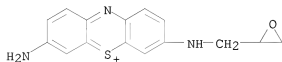
the presence of BF<sub>3</sub>.EtO in DMSO at 60° for 6 h, followed by treatment with HCl gave 41.3% polymer [65544-58-3] having reduced viscosity (0.1 g/17 mL DMSO, 30°) 0.12 dL/g which was soluble in water, DMF, DMSO, and alc. The polymer had better light resistance than thionine itself.

IT 65544-09-4P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(manufacture and polymerization of)

RN 65544-09-4 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[(2-oxiranylmethyl)amino]-, chloride, hydrochloride (1:1:2) (CA INDEX NAME)



● Cl<sup>-</sup>

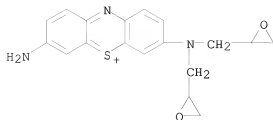
● 2 HCl

IT 65544-11-8P 65544-58-3P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

RN 65544-11-8 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[bis(2-oxiranylmethyl)amino]-, chloride, hydrochloride (1:1:2) (CA INDEX NAME)



● Cl<sup>-</sup>

● 2 HCl

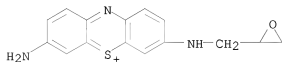
RN 65544-58-3 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[(oxiranylmethyl)amino]-, chloride, dihydrochloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 65544-09-4

CMF C15 H14 N3 O S . 2 Cl H . Cl



● Cl<sup>-</sup>

● 2 HCl

L11 ANSWER 18 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1981:135038 CAPLUS

DOCUMENT NUMBER: 94:135038

ORIGINAL REFERENCE NO.: 94:22062h,22063a

TITLE: Complex of enzyme and redox compound

PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

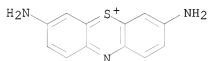
PATENT NO.

KIND DATE

APPLICATION NO.

DATE

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 JP 55148089 A 19801118 JP 1979-57325 19790509 <--  
 JP 01034598 B 19890720  
 PRIORITY APPLN. INFO.: JP 1979-57325 A 19790509 <--  
 AB An enzyme-redox compound is prepared by linking the redox compound to an enzyme in the presence of crosslinking agents; the enzyme-redox compound complex may be used to prepare enzyme electrode or carriers (such as filter paper) containing immobilized enzymes. Thus, a glucose oxidase-thionine complex was prepared by reacting 20 mg glucose oxidase and 50  $\mu$ l saturated solution of thionine in the presence of glutaraldehyde. The product may be homogenized and mixed with graphite or other electrode-forming materials to prepare a glucose oxidase electrode, which may be used in assaying glucose.  
 IT 581-64-6DP, glucose oxidase complex  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and applications of)  
 RN 581-64-6 CAPLUS  
 CN Phenothiazin-5-ium, 3,7-diamino-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

L11 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1981:4950 CAPLUS  
 DOCUMENT NUMBER: 94:4950  
 ORIGINAL REFERENCE NO.: 94:905a,908a  
 TITLE: Polynuclear metal complexes of dyes  
 PATENT ASSIGNEE(S): Institute of Physical and Chemical Research, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

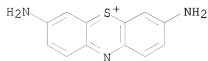
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55089357	A	19800705	JP 1978-161347	19781227 <--
JP 61006863	B	19860301		

PRIORITY APPLN. INFO.: JP 1978-161347 A 19781227 <--  
 AB Ma(SRS)b(D+)cOd(OH)e(H2O)f.nH2O [M = Group IB, IIB, VIB, or VIII metal, Sn, or Pb ion; SRS = dithiolate anion; R = alkylene; D+ = cation of phenothiazine, phenazine, triphenylmethane, xanthene, cyanine, or flavin dyes; O = oxo ligand; OH = hydroxo ligand; a-f = nos. satisfying coordination number (4, 5, 6) of M] were prepared having faster or slower fading rate than D. For example, aqueous CuSO4.5H2O (2 mmol) was treated with 2 mmol di-Na maleonitriledithiolate (Na2MNT) in MeOH and then with 2 mmol thionine (TH) in 1:1 H2O-MeOH to give diamagnetic Cu(I)8(MNT)8(TH)5 (as dodecahydrate) with fading rate constant (in hempa) 1.15 min<sup>-1</sup>, compared with 0.700 for TH.  
 IT 581-64-6DP, complexes with copper and disodium maleonitriledithioate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation); RACT (Reactant or reagent)  
(preparation and photofading of)

RN 581-64-6 CAPLUS

CN Phenothiazin-5-ium, 3,7-diamino-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

L11 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1980:473789 CAPLUS

DOCUMENT NUMBER: 93:73789

ORIGINAL REFERENCE NO.: 93:11995a,11998a

TITLE: Dyes containing amino- or imino groups

INVENTOR(S): Long, William Edward

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., UK

SOURCE: Ger. Offen., 15 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

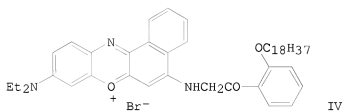
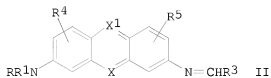
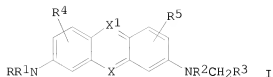
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2907438	A1	19800424	DE 1979-2907438	19790226 <--
US 4237281	A	19801202	US 1979-14780	19790223 <--
FR 2438672	A1	19800509	FR 1979-4912	19790226 <--
GB 2032940	A	19800514	GB 1979-6757	19790226 <--
GB 2032940	B	19821027		
BE 874476	A1	19790827	BE 1979-193716	19790227 <--
JP 55052351	A	19800416	JP 1979-21467	19790227 <--
US 4386149	A	19830531	US 1981-235352	19810213 <--
PRIORITY APPLN. INFO.:			GB 1978-40401	A 19781013 <--
			GB 1978-7789	A 19780228 <--
			GB 1978-42414	A 19781030 <--
			GB 1978-45305	A 19781120 <--
			US 1979-14776	A3 19790223 <--

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AB Photog. dyes of general structure I and II are prepared, where X = S+, O+, N or N+R6 (R6 = H, alkyl, aryl); X1 = N or CR7 (R7 = H, alkyl, aryl); R, R1 and R2 = H, Cl-4 alkyl, or aryl (or form a ring with the N atom); R3 is an activating group containing at least one double bond system and a ballast group; and R4 and R5 are substituents or form a condensed benzene ring. I and II are reductively cleaved at the NR2CH or N:CH group during development of exposed Ag halide emulsion layers and give diffusible, image-forming dyes. Thus, treatment of Nile Blue A base (III) [7385-68-4] with 2-Cl18H37OC6H4COCH2Br [74388-03-7] in (MeOCH2CH2)2O at reflux gave IV [72924-76-6]. The imino analog [74388-04-8] of IV was prepared by reaction of III with 4-Cl18H37OC6H4CHO [4105-95-7]. Other dyes were similarly prepared

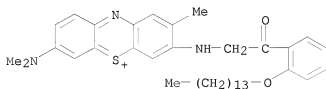
IT 74388-07-1P

RL: PREP (Preparation)

(manufacture of, as dye for diffusion-transfer color photog.)

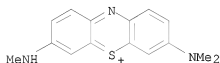
RN 74388-07-1 CAPLUS

CN Phenothiazin-5-ium, 7-(dimethylamino)-2-methyl-3-[[2-oxo-2-(2-(tetradecyloxy)phenyl)ethylamino]-, bromide (1:1) (CA INDEX NAME)



ORIGINAL REFERENCE NO.: 93:8035a,8038a  
 TITLE: Azure B, microscopic dye, by gentle oxidative degradation of Methylene blue  
 INVENTOR(S): Gigi, Stelian; Paucescu, Victor; Teodorescu, Marilena; Rotaru, Magdalena; Neacsu, Ioana  
 PATENT ASSIGNEE(S): Intreprinderea Chimica "Ducesti", Rom.  
 SOURCE: Rom., 5 pp.  
 CODEN: RUXXA3  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Romanian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RO 63783	A2	19780815	RO 1973-76311	19731011 <--
PRIORITY APPLN. INFO.:			RO 1973-76311	19731011 <--
AB Methylene blue (I) [61-73-4] is treated by aqueous Na2Cr2O7 at 70° to obtain the dichromate salt of I as a precipitate, which is dried in air, washed, refluxed 3 h with dilute HCl under CO2, salted out with NaBr, and extracted with MeOH under CO2 to remove inorg. salts to give hydrobromide salt [74062-05-8] of Azure B in 84% yield with low concns. of byproducts Azure A and C.				
IT 74062-05-8P RL: PREP (Preparation) (manufacture of, by oxidative degradation of methylene blue)				
RN 74062-05-8 CAPLUS				
CN Phenothiazin-5-ium, 3-(dimethylamino)-7-(methylamino)-, chloride, hydrobromide (1:1:?) (CA INDEX NAME)				



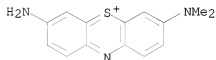
●x HBr

● Cl<sup>-</sup>

L11 ANSWER 22 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1979:594625 CAPLUS  
 DOCUMENT NUMBER: 91:194625  
 ORIGINAL REFERENCE NO.: 91:31355a,31358a  
 TITLE: Total synthesis of phenothiazine blue dyes A + B  
 INVENTOR(S): Gigi, Stelian; Paucescu, Victor; Rotaru, Magdalena  
 PATENT ASSIGNEE(S): Intreprinderea Chimica "Ducesti", Rom.  
 SOURCE: Rom., 4 pp.  
 CODEN: RUXXA3  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Romanian  
 FAMILY ACC. NUM. COUNT: 1

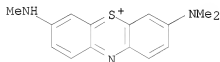
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	RO 63231	A2	19780220	RO 1974-77807	19740225 <--
PRIORITY APPLN. INFO.:				RO 1974-77807	19740225 <--
AB	<p>Azure A [531-53-3] and Azure B [531-55-5], useful in microscopy, are manufactured by a process comprising treatment of N,N-dimethyl-p-phenylenediamine [99-98-9] with Na2S2O3·5H2O in the presence of ZnCl2 and Al2(SO4)3 at -1° under CO2, and then treatment of the intermediate with PhNH2 [62-53-3] or PhNHMe [100-61-8] in the presence of Na2Cr2O7·2H2O at 1-80°, followed by treatment of the reaction mixture with CuSO4·5H2O, treatment with H2SO4, salting out at 40° with NaBr or NaCl, and extraction with MeOH.</p>				
IT	<p>531-53-3P 531-55-5P            RL: IMF (Industrial manufacture); PREP (Preparation) (preparation of)</p>				
RN	<p>531-53-3 CAPLUS</p>				
CN	<p>Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-, chloride (1:1) (CA INDEX NAME)</p>				



● Cl<sup>-</sup>

RN 531-55-5 CAPLUS  
 CN Phenothiazin-5-ium, 3-(dimethylamino)-7-(methylamino)-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

L11 ANSWER 23 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1979:475084 CAPLUS  
 DOCUMENT NUMBER: 91:75084  
 ORIGINAL REFERENCE NO.: 91:12161a,12164a  
 TITLE: Glycidyl group-containing dye polymers  
 INVENTOR(S): Shigehara, Kiyotaka; Tsuchida, Eishun  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 54048897	A	19790417	JP 1978-111526	19780911 <--
	JP 60008010	B	19850228		

PRIORITY APPLN. INFO.: JP 1978-111526 A 19780911 <--

AB Coloring materials having glycidyl groups are polymerized to give polymers having coloring groups. Thus, a mixture of 0.392 g 7-glycidylamino-3-imino-3H-phenothiazine-HCl, 100 mL Me2SO, and 1 mL of 10% BF3 in Et2O, was stirred in a sealed tube at 60° for 6 h to give 0.102 g polymer [65544-58-3] having reduced viscosity 0.12 d L/g (30°, 0.1 g/17 mL Me2SO).

IT 65544-10-7P 65544-12-9P 65544-58-3P  
RL: PREP (Preparation)  
(preparation of colored)

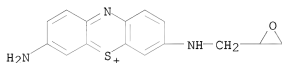
RN 65544-10-7 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[(oxiranylmethyl)amino]-, chloride, dihydrochloride, polymer with methyloxirane (9CI) (CA INDEX NAME)

CM 1

CRN 65544-09-4

CMF C15 H14 N3 O S . 2 Cl H . Cl



● Cl<sup>-</sup>

● 2 HCl

CM 2

CRN 75-56-9

CMF C3 H6 O



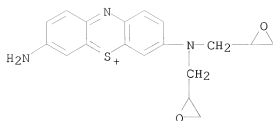
RN 65544-12-9 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[bis(oxiranylmethyl)amino]-, chloride, dihydrochloride, polymer with methyloxirane (9CI) (CA INDEX NAME)

CM 1

CRN 65544-11-8

CMF C18 H18 N3 O2 S . 2 Cl H . Cl



CM 2

CRN 75-56-9

CMF C3 H6 O



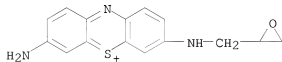
RN 65544-58-3 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[(oxiranylmethyl)amino]-, chloride, dihydrochloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 65544-09-4

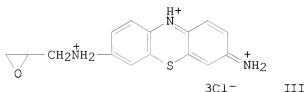
CMF C15 H14 N3 O S . 2 Cl H . Cl



ACCESSION NUMBER: 1978:426022 CAPLUS  
 DOCUMENT NUMBER: 89:26022  
 ORIGINAL REFERENCE NO.: 89:4037a,4040a  
 TITLE: Glycidyl group-containing monomeric and polymeric dyes  
 INVENTOR(S): Shigehara, Kiyotaka; Tsuchida, Hidetoshi  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52121038	A	19771012	JP 1976-36986	19760403 <--
JP 60018701	B	19850511		

PRIORITY APPLN. INFO.: JP 1976-36986 A 19760403 <--  
 GI

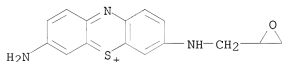


AB Amino group-containing dyes were treated with epichlorohydrin (I) [106-89-8] or other glycidyl compds., and the resulting glycidyl group-containing dyes were homopolymd. or copolymd. with propylene oxide. For example, I and thionine (II) [581-64-6] in DMF were heated at 40° for 5 h in the dark and treated with HCl to give 47.3% violet black III [65544-09-4] which was homopolymd. in the presence of BF<sub>3</sub>.Et<sub>2</sub>O to give polymer with better lightfastness than II.

IT 65544-09-4P 65544-11-8P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manufacture and polymerization of)

RN 65544-09-4 CAPLUS

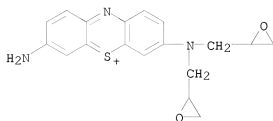
CN Phenothiazin-5-ium, 3-amino-7-[(2-oxiranymethyl)amino]-, chloride, hydrochloride (1:1:2) (CA INDEX NAME)



● Cl<sup>-</sup>

● 2 HCl

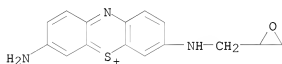
RN 65544-11-8 CAPLUS  
 CN Phenothiazin-5-ium, 3-amino-7-[bis(2-oxiranylmethyl)amino]-, chloride, hydrochloride (1:1:2) (CA INDEX NAME)



● Cl<sup>-</sup>

●2 HCl

IT 65544-10-7P 65544-12-9P 65544-58-3P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of)  
 RN 65544-10-7 CAPLUS  
 CN Phenothiazin-5-ium, 3-amino-7-[(oxiranylmethyl)amino]-, chloride, dihydrochloride, polymer with methyloxirane (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 65544-09-4  
 CMF C15 H14 N3 O S . 2 Cl H . Cl



● Cl<sup>-</sup>

●2 HCl

CM 2  
 CRN 75-56-9  
 CMF C3 H6 O

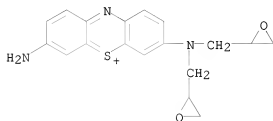


RN 65544-12-9 CAPLUS  
 CN Phenothiazin-5-ium, 3-amino-7-[bis(oxiranylmethyl)amino]-, chloride, dihydrochloride, polymer with methyloxirane (9CI) (CA INDEX NAME)

CM 1

CRN 65544-11-8

CMF C18 H18 N3 O2 S . 2 Cl H . Cl



● Cl<sup>-</sup>

●2 HCl

CM 2

CRN 75-56-9

CMF C3 H6 O

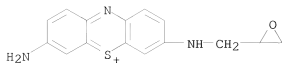


RN 65544-58-3 CAPLUS  
 CN Phenothiazin-5-ium, 3-amino-7-[(oxiranylmethyl)amino]-, chloride, dihydrochloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 65544-09-4

CMF C15 H14 N3 O S . 2 Cl H . Cl

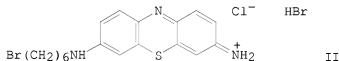


● Cl<sup>-</sup>

● 2 HCl

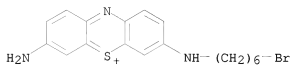
L11 ANSWER 25 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1978:91046 CAPLUS  
 DOCUMENT NUMBER: 88:91046  
 ORIGINAL REFERENCE NO.: 88:14266h,14267a  
 TITLE: Active halogen-containing dye derivatives  
 INVENTOR(S): Shigehara, Kiyotaka; Tsuchida, Hidetoshi  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52121037	A	19771012	JP 1976-36985	19760402 <--
JP 55033776	B	19800902		
PRIORITY APPLN. INFO.:			JP 1976-36985	A 19760402 <--



AB Amino group-containing dyes were treated with 1,6-dibromohexane (I) [629-03-8] or adipoyl chloride [111-50-2], and the resulting compds. containing active halogen were treated with amino-group containing polymers to give polymeric dyes. For example, thionine [581-64-6] in DMF was treated with I to give 19.6% violet black II [65544-48-1] which was treated with poly(4-vinylpyridine) to give bluish violet polymeric dye [65544-50-5].  
 IT 65544-48-1DP, reaction products with polyethylenimine and hydrolyzed poly(vinylphthalimide) 65544-48-1P  
 65544-50-5P 65561-99-1P 65562-00-7DP, reaction products with polyethylenimine and hydrolyzed poly(vinylphthalimide) 65562-00-7P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of)  
 RN 65544-48-1 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[(6-bromohexyl)amino]-, chloride,  
hydrobromide (1:1:1) (CA INDEX NAME)

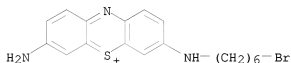


● HBr

● Cl<sup>-</sup>

RN 65544-48-1 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[(6-bromohexyl)amino]-, chloride,  
hydrobromide (1:1:1) (CA INDEX NAME)



● HBr

● Cl<sup>-</sup>

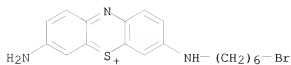
RN 65544-50-5 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[(6-bromohexyl)amino]-, chloride,  
monohydrobromide, compd. with 4-ethenylpyridine homopolymer (9CI) (CA  
INDEX NAME)

CM 1

CRN 65544-48-1

CMF C18 H21 Br N3 S . Br H . Cl



● HBr

● Cl<sup>-</sup>

CM 2

CRN 25232-41-1

CMF (C7 H7 N)x

CCI PMS

CM 3

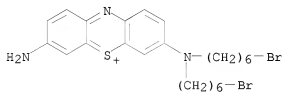
CRN 100-43-6

CMF C7 H7 N



RN 65561-99-1 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-[bis(6-bromohexyl)amino]-, chloride, hydrobromide (1:1:1) (CA INDEX NAME)

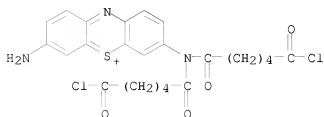


● HBr

● Cl<sup>-</sup>

RN 65562-00-7 CAPLUS

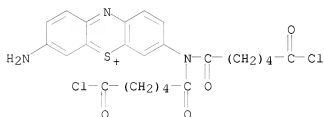
CN Phenothiazin-5-ium, 7-amino-3-[bis(6-chloro-1,6-dioxohexyl)amino]-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 65562-00-7 CAPLUS

CN Phenothiazin-5-ium, 7-amino-3-[bis(6-chloro-1,6-dioxohexyl)amino]-, chloride (1:1) (CA INDEX NAME)



● Cl<sup>-</sup>

L11 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1978:63267 CAPLUS

DOCUMENT NUMBER: 88:63267

ORIGINAL REFERENCE NO.: 88:9995a,9998a

TITLE: Leuco dyes

INVENTOR(S): Miyakawa, Michihiro; Torii, Saburo

PATENT ASSIGNEE(S): Mita Industrial Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

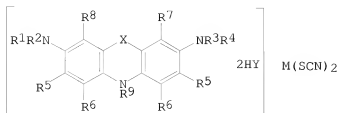
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52105931	A	19770906	JP 1976-21863	19760302 <--
JP 57047696	B	19821012		
PRIORITY APPLN. INFO.:			JP 1976-21863	A 19760302 <--
GI				



AB Leuco dyes I (X = O, S; R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> = H, lower alkyl, Ph, PhCH<sub>2</sub>; R<sup>5</sup>, R<sup>6</sup> = H, lower alkoxy, Me; R<sup>7</sup>, R<sup>8</sup> = H, Me; R<sup>9</sup> = H, acyl, organosulfonyl, Y = monovalent anion; M = Group II metal) were prepared. For example, Methylene blue [61-73-4] in water was reduced with Zn/POCl<sub>3</sub> and treated with NH<sub>4</sub>SCN to give I (R<sup>1</sup> - R<sup>4</sup> = Me; R<sup>5</sup> - R<sup>9</sup> = H; X = S; Y = Cl; M = Zn) [65286-25-1] with better storability (judged by coloration in 50° air, 1 h) than the corresponding ZnCl<sub>2</sub> double salt.

IT 65296-76-6P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

RN 65296-76-6 CAPLUS

CN Phenothiazin-5-ium, 3,7-bis(ethylamino)-2,8-dimethyl-, hydrogen  
(T-4)-dichlorobis(thiocyanato-N)zincate(2-) (1:1:1), monohydrochloride  
(9CI) (CA INDEX NAME)

CM 1

CRN 65296-75-5

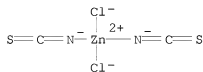
CMF C18 H22 N3 S . C2 Cl2 N2 S2 Zn . H

CM 2

CRN 65296-72-2

CMF C2 Cl2 N2 S2 Zn

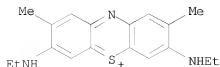
CCI CCS



CM 3

CRN 10309-89-4

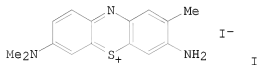
CMF C18 H22 N3 S



DOCUMENT NUMBER: 88:27831  
 ORIGINAL REFERENCE NO.: 88:4363a,4366a  
 TITLE: Iodine-131-containing toluidine blue and  
 iodine-125-containing toluidine blue  
 INVENTOR(S): Chen-Stute, Annette  
 PATENT ASSIGNEE(S): Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 13 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2607680	A1	19770901	DE 1976-2607680	19760225 <--
DE 2607680	C2	19890105		

PRIORITY APPLN. INFO.: DE 1976-2607680 19760225 <--  
 GI

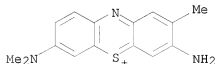


AB A method is described for preparation of toluidine blue iodide-125I (I-125I) [64917-86-8] and I-131I [52031-13-7] for use in liver scintigraphy. The method is characterized by high yield, purity, stability, sp. activity, and radiochem. purity of the product and the small injection volume required. Thus, to a sterile aqueous solution of 20 mg toluidine blue in 1 mL was added 125I or 131I (about 200 mCi/mL), followed, after 30-s mixing, by 0.5 mL of a sterile solution of KIO3 and KI (321 and 479 mg/100 mL, resp.), and, after another 30 s, by 1 drop of 25% HCl. Coupling was about 95% complete after 24 h, and free I was removed by ion-exchanger treatment.

IT 52031-13-7P 64917-86-8P  
 RL: PREP (Preparation)  
 (preparation of, for gallbladder and liver scintigraphy)

RN 52031-13-7 CAPLUS

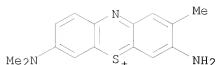
CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-, iodide-131I (9CI)  
 (CA INDEX NAME)



● 131I-

RN 64917-86-8 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-, iodide-125I (9CI)  
 (CA INDEX NAME)



● 1251-

L11 ANSWER 28 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1974:507366 CAPLUS  
DOCUMENT NUMBER: 81:107366  
ORIGINAL REFERENCE NO.: 81:16987a,16990a  
TITLE: Methylthionine eosinates  
INVENTOR(S): Gabriel, Edwin; Jahn, Horst  
PATENT ASSIGNEE(S): Calbiochem  
SOURCE: Ger. Offen., 7 pp.  
CODEN: GWXXBX

DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2334277	A1	19740131	DE 1973-2334277	19730705 <--
CH 569050	A5	19751114	CH 1972-10448	19720712
FR 2192564	A7	19740208	FR 1973-25183	19730710 <--
JP 49059134	A	19740608	JP 1973-77965	19730712 <--
GB 1400897	A	19750723	GB 1973-33387	19730712 <--
PRIORITY APPLN. INFO.:			CH 1972-10448	A 19720712 <--

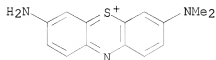
AB Polychromatic N,N-dimethylthionine eosinate (I) [52438-88-7] and N-methylthionine eosinate (II) [51635-96-2] were prepared for use in staining of hematol. and bacteriol. smears. Thus, methylene blue B was oxidized with K2Cr2O7 in refluxing aqueous HCl to give N,N-dimethylthionine [531-53-3], which on reaction with an aqueous solution containing 1 g eosine/l. gave

I. Similarly prepared was II.

IT 531-53-3P 531-57-7P 52549-64-1P  
52549-65-2P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

RN 531-53-3 CAPLUS

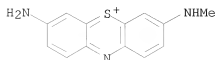
CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



● C1-

RN 531-57-7 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-(methylamino)-, chloride (1:1) (CA INDEX NAME)



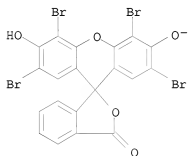
RN 52549-64-1 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-, salt with 2',4',5',7'-tetrabromo-3',6'-dihydroxyspiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one (1:1) (CA INDEX NAME)

CM 1

CRN 52873-39-9

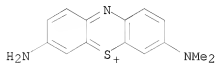
CMF C20 H7 Br4 O5



CM 2

CRN 29120-23-8

CMF C14 H14 N3 S



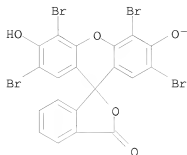
RN 52549-65-2 CAPLUS

CN Phenothiazin-5-ium, 3-amino-7-(methylamino)-, salt with 2',4',5',7'-tetrabromo-3',6'-dihydroxyspiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one (1:1) (CA INDEX NAME)

CM 1

CRN 52873-39-9

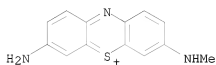
CMF C20 H7 Br4 O5



CM 2

CRN 30719-07-4

CMF C13 H12 N3 S



=> fil stnguide

COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

163.40

544.16

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE  
ENTRY

TOTAL  
SESSION

CA SUBSCRIBER PRICE

-22.96

-30.34

FILE 'STNGUIDE' ENTERED AT 17:54:28 ON 16 MAR 2009

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Mar 13, 2009 (20090313/UP).

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

0.35

544.51

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE  
ENTRY

TOTAL  
SESSION

CA SUBSCRIBER PRICE

0.00

-30.34

STN INTERNATIONAL LOGOFF AT 17:57:18 ON 16 MAR 2009